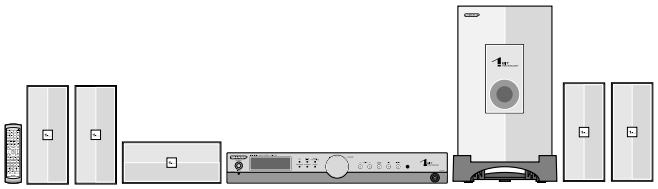
SHARP SERVICE MANUAL

No. S5351SDAT1000



1-BIT DIGITAL HOME CINEMA

MODEL SD-AT1000H

SD-AT1000H 1-Bit Digital Home Cinema consisting of SD-AT1000H (main unit), CP-AT1000HF (front speakers), CP-AT1000HC (center speaker), CP-AT1000HR (surround speakers) and CP-AT1000HSW (subwoofer).

- In the interests of user-safety the set should be restored to its original condition and only parts identical to those specified be used.

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SHARP CORPORATION

This document has been published to be used for after sales service only.
The contents are subject to change without notice.

SAFETY PRECAUTION FOR SERVICE MANUAL

Precaution to be taken when replacing and servicing the Laser Pickup.

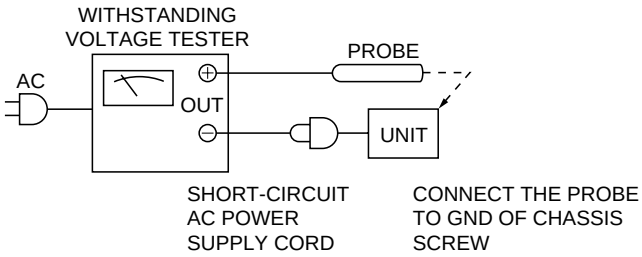
The AEL (Accessible Emission Level) of Laser Power Output for this model is specified to be lower than Class 1 Requirements. However, the following precautions must be observed during servicing to protect your eyes against exposure to the Laser beam.

(1) When the cabinet has been removed, the power is turned on without a compact disc, and the Pickup is on a position outer than the lead-in position, the Laser will light for several seconds to detect a disc. Do not look into the Pickup Lens.
(2) The Laser Power Output of the Pickup inside the unit and replacement service parts have already been adjusted prior to shipping.
(3) No adjustment to the Laser Power should be attempted when replacing or servicing the Pickup.
(4) Under no circumstances look directly into the Pickup Lens at any time.
(5) CAUTION - Use of controls or adjustments, or performance of procedures other than those specified herein may result in hazardous radiation exposure.

IMPORTANT SERVICE NOTES (FOR U.K. ONLY)

Before returning the unit to the customer after completion of a repair or adjustment it is necessary for the following withstand voltage test to be applied to ensure the unit is safe for the customer to use.
Setting of Withstanding Voltage Tester and set.

Set name	set value
Withstanding Voltage Tester	
Test voltage	4.7 kV DC
Set time	3 secs
Set current (Cutoff current)	3 mA
Unit	
Judgment	
OK: The “GOOD” lamp lights. NG: The “NG” lamp lights and the buzzer sounds.	

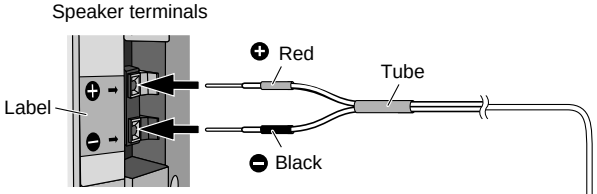


■ Connecting speaker wires

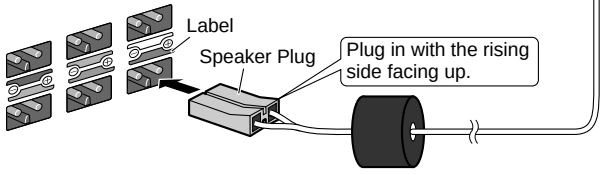
Make sure to leave the AC power lead disconnected when connecting the speakers.

To prevent accidental short circuit between ⊕ and ⊖ terminals, connect the speaker wires to the speakers first then to the unit.

1 Connect the wires to the speakers.

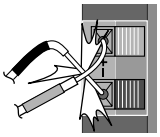


2 Connect the other end to the main unit.



Caution:

- **The supplied speakers are exclusively for SD-AT1000H. Do not connect them to other equipment, and do not connect other speakers to SD-AT1000H. It may cause malfunction.**
- Do not mistake the ⊕ and ⊖, and right and left terminals of the speaker leads. (The right speaker is placed on the right when you face the unit.)
- **Do not let the bare speaker wires touch each other.**
- Do not stand or sit on the speakers. You may be injured.
- Insert the speaker plug fully with the rising side facing up.
- Hold the speaker plug when removing it from the main unit. Pulling the lead may cause malfunction to the unit.



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FOR A COMPLETE DESCRIPTION OF THE OPERATION OF THIS UNIT, PLEASE REFER TO THE OPERATION MANUAL.

SPECIFICATIONS

SD-AT1000H

■ **Main unit**

Power source	AC 230 V, 50 Hz
Power consumption	Power on: 80 W Power stand-by: 0.8 W
Amplification system	2.8224 MHz (64fs) 1-bit switching (remarks: fs = 44.1 kHz)
Output power	Front speakers: RMS: 200 W (100 W + 100 W) (10 % T.H.D., 1 kHz) Centre speaker: RMS: 100 W (10 % T.H.D., 1 kHz) Surround speakers: RMS: 200 W (100 W + 100 W) (10 % T.H.D., 1 kHz) Subwoofer: RMS: 100 W (10 % T.H.D., 100 Hz)
A/D noise shaping	7th-order ΔΣ (delta - sigma) modulation
Frequency range	FM: 87.5 - 108 MHz AM: 522 - 1,620 kHz
Audio input terminals	Coaxial digital input (DIGITAL 1): RCA type × 1 Optical digital input (DIGITAL 2): Square type × 1 Analogue input (LINE 1): RCA type × 1 pair (L/R) Analogue input (LINE 2): RCA type × 1 pair (L/R) Analogue input (LINE 3): RCA type × 1 pair (L/R)
Audio output terminals	Front speakers, Centre speaker, Surround speakers and Subwoofer: 4 ohms Headphones: 16 - 50 ohms (recommended: 32 ohms) Subwoofer Pre Out: 10 k ohms Analogue output (LINE 1): RCA type × 1 pair (L/R)
Dimensions	Width: 430 mm (16-7/8") Height: 67 mm (2-9/16") Depth: 324 mm (12-3/4")
Weight	4.0 kg (8.8 lbs.)

CP-AT1000HF

Type	Full range speaker system (magnetic shield) 8 cm (3-1/8") speaker × 2
Impedance	4 ohms
Dimensions	Width: 105 mm (4-1/8") Height: 251 mm (9-7/8") Depth: 125 mm (4-7/8")
Weight	1.5 kg (3.3 lbs.)/each

CP-AT1000HC

Type	Full range speaker system (magnetic shield) 8 cm (3-1/8") speaker × 2
Impedance	4 ohms
Dimensions	Width: 251 mm (9-7/8") Height: 105 mm (4-1/8") Depth: 125 mm (4-7/8")
Weight	1.5 kg (3.3 lbs.)

CP-AT1000HR

Type	Full range speaker system 8 cm (3-1/8") Speaker
Impedance	4 ohms
Dimensions	Width: 105 mm (4-1/8") Height: 251 mm (9-7/8") Depth: 125 mm (4-7/8")
Weight	0.9 kg (2.0 lbs.)/each

CP-AT1000HSW

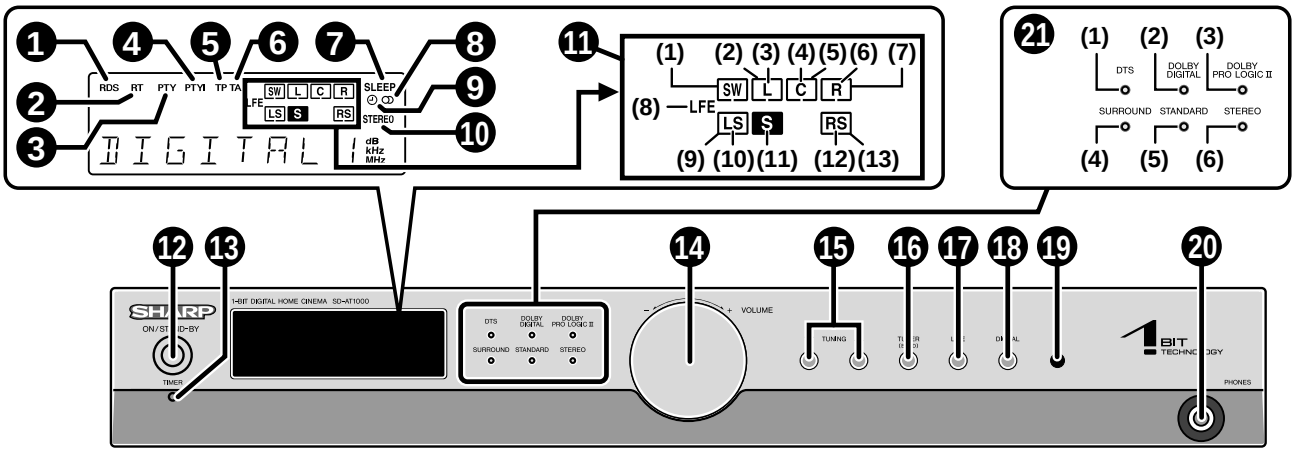
Type	16 cm (6-1/4") woofer (magnetic shield)
Impedance	4 ohms
Dimensions	Width: 240 mm (9-1/2") Height: 408 mm (16-1/16") Depth: 306 mm (12")
Weight	6.3 kg (13.9 lbs.)

Specifications for this model are subject to change without prior notice.

NAMES OF PARTS

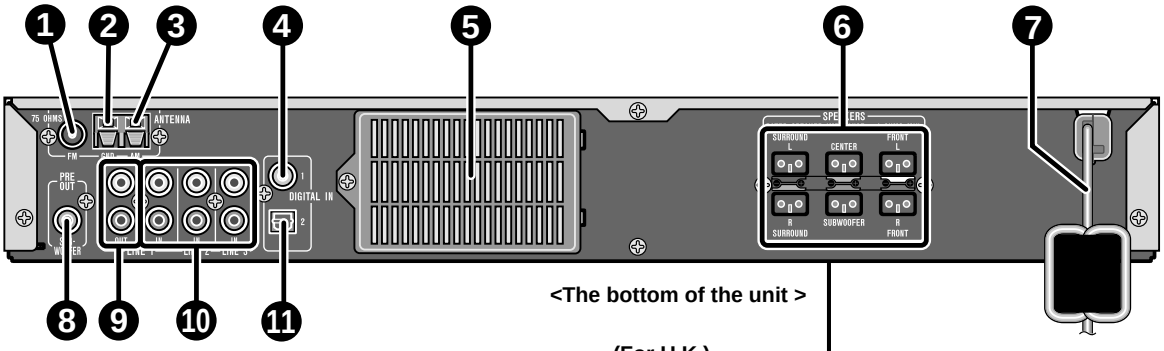
SD-AT1000H

■ Main unit (front panel)



1. **RDS Indicator**
2. **Radio Text Indicator**
3. **Programme Type Indicator**
4. **Dynamic PTY Indicator**
5. **Traffic Programme Indicator**
6. **Traffic Announcement Indicator**
7. **Sleep Indicator**
8. **FM Stereo Receiving Indicator**
9. **Timer Play Indicator**
10. **FM Stereo Mode Indicator**
11. **Audio Signal Indicators/Speaker Indicators**
    - (1) Subwoofer Indicator
    - (2) Left Front Speaker Indicator
    - (3) Front Left Signal Indicator
    - (4) Centre Signal Indicator
    - (5) Centre Speaker Indicator
    - (6) Front Right Signal Indicator
    - (7) Right Front Speaker Indicator
    - (8) Low Frequency Effect Signal Indicator
    - (9) Left Surround Speaker Indicator
    - (10) Surround Left Signal Indicator
    - (11) Surround Monaural Signal Indicator
    - (12) Surround Right Signal Indicator
    - (13) Right Surround Speaker Indicator
12. **On/Stand-by Button**
13. **Timer Set Indicator**
14. **Volume Control**
15. **Tuning Up and Down Buttons**
16. **Tuner (Band) Button**
17. **Line Input Select Button**
18. **Digital Input Select Button**
19. **Remote Sensor**
20. **Headphone Socket**
21. **Sound Mode Indicators**
    - (1) DTS Signal Indicator
    - (2) Dolby Digital Signal Indicator
    - (3) Dolby Pro Logic Ⅱ Indicator
    - (4) Surround Indicator
    - (5) Standard Indicator
    - (6) Stereo Indicator

■ Main unit (rear panel)



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(For U.K.)

SHARP	MODEL NO. SD-AT1000H
1-BIT DIGITAL HOME CINEMA 230V ∿ 50Hz 80W FREQUENCY RANGE : FM 87.5 - 108 MHz AM 522 - 1620 kHz	
SERIAL NO.	
SHARP CORPORATION	MADE IN MALAYSIA

(Except for U.K.)

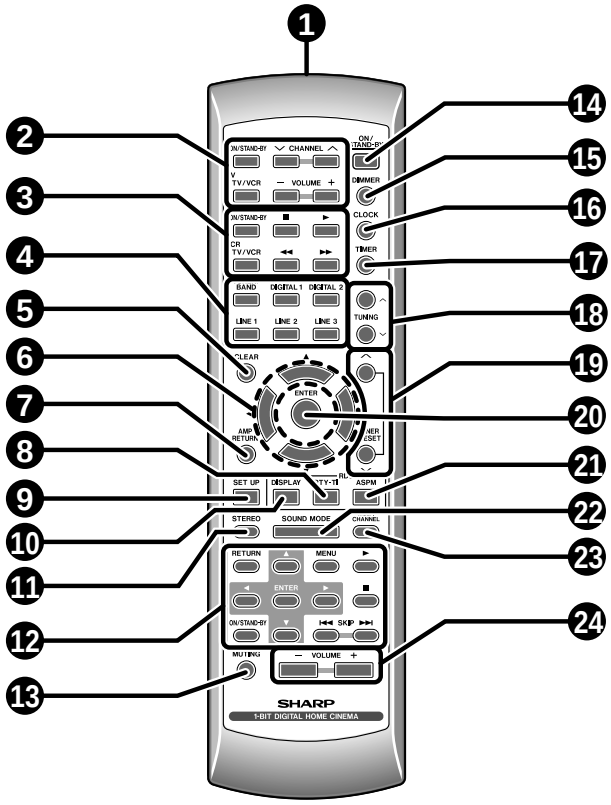
SHARP	MODEL NO. SD-AT1000H
1-BIT DIGITAL HOME CINEMA 230V ∿ 50Hz 80W	
SERIAL NO.	
SHARP CORPORATION	MADE IN MALAYSIA

1. **FM 75 Ohms Aerial Socket**
2. **Aerial Earth Terminal**
3. **AM Loop Aerial Terminal**
4. **Coaxial Digital Audio Input Socket**
5. **Cooling Fan**
6. **Speaker Terminals**
7. **AC Power Lead**
8. **Subwoofer Pre Output Socket**
9. **Audio Line Output Sockets**
10. **Audio Line Input Sockets**
11. **Optical Digital Audio Input Socket**

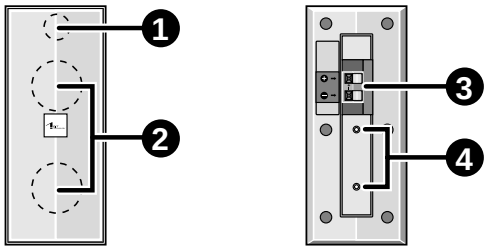
SD-AT1000H

■ Remote control

1. Remote Control Transmitter
2. TV Operation Buttons
3. VCR Operation Buttons
4. Input Select Buttons
5. Clear Button
6. Cursor Buttons
7. Amplifier Return Button
8. RDS Programme Type/Traffic Information Search Button
9. Amplifier Initial Setting Button
10. RDS Display Mode Select Button
11. 2-channel Stereo Sounds Select Button
12. DVD Operation Buttons
13. Muting Button
14. On/Stand-by Button
15. Dimmer Button
16. Clock Button
17. Timer Button
18. Tuning Up and Down Buttons
19. Tuner Preset Up and Down Buttons
20. Enter Button
21. RDS ASPM (Auto Station Programme Memory) Button
22. Sound Mode Select Button
23. Multi Channel Select Button
24. Volume Up and Down Buttons

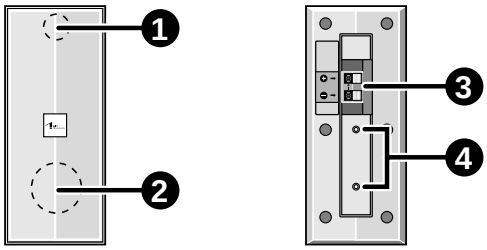


CP-AT1000HF x 2



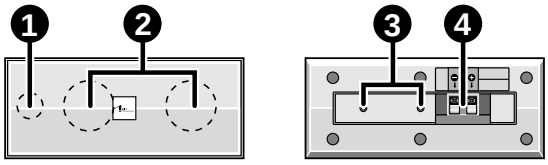
1. Bass Reflex Duct
2. Speakers
3. Speaker Terminals
4. Mounting Holes for Stand or Bracket

CP-AT1000HR x 2



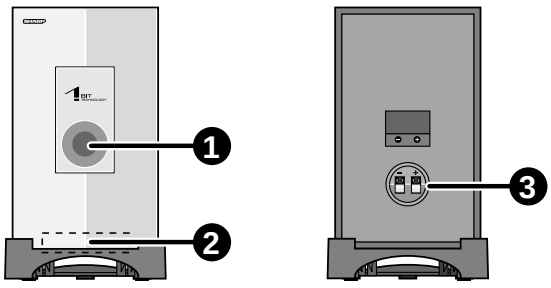
1. Bass Reflex Duct
2. Speaker
3. Speaker Terminals
4. Mounting Holes for Stand or Bracket

CP-AT1000HC x 1



1. Bass Reflex Duct
2. Speakers
3. Mounting Holes for Bracket
4. Speaker Terminals

CP-AT1000HSW x 1



1. Bass Reflex Duct
2. Woofer
3. Speaker Terminals

DISASSEMBLY

Caution on Disassembly
Follow the below-mentioned notes when disassembling the unit and reassembling it, to keep it safe and ensure excellent performance:
1. Be sure to remove the power supply plug from the wall outlet before starting to disassemble the unit.
2. Take off nylon bands or wire holders where they need to be removed when disassembling the unit. After servicing the unit, be sure to rearrange the leads where they were before disassembling.
3. Take sufficient care on static electricity of integrated circuits and other circuits when servicing.

SD-AT1000H

STEP	REMOVAL	PROCEDURE	FIGURE
1	Top Cabinet	1. Screw ..... (A1) x5 (Note)	6-1, 2
2	Rear Panel with Tuner Unit	1. Screw ..... (B1) x8 2. Fan Cover ..... (B2) x1 3. Screw ..... (B3) x1 4. Flat Cable ..... (B4) x1 5. Socket ..... (B5) x1	6-3
3	Front Panel	1. Screw ..... (C1) x8 2. Socket ..... (C2) x1 3. Flat Cable ..... (C3) x2	6-3
4	1-Bit Top Heat Sink	1. Screw ..... (D1) x6 2. EMC Bracket ..... (D2) x1	7-1
5	Headphones PWB	1. Screw ..... (E1) x1 2. Nut ..... (E2) x1 3. Socket ..... (E3) x1	7-1
6	Power PWB	1. Screw ..... (F1) x13 2. Socket ..... (F2) x2	7-2
7	Main PWB	1. Screw ..... (G1) x5	7-2
8	Display PWB/ Remote Sensor PWB	1. Knob ..... (H1) x1 2. Nut ..... (H2) x1 3. Screw ..... (H3) x10	7-3

Note:
Pull the upper top cabinet toward you, and lift up one side to remove the upper top cabinet (see arrows in the figure).

SD-AT1000H

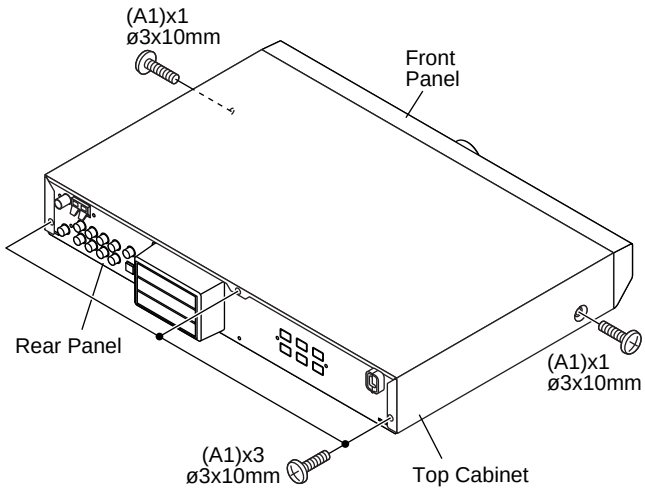


Figure 6-1

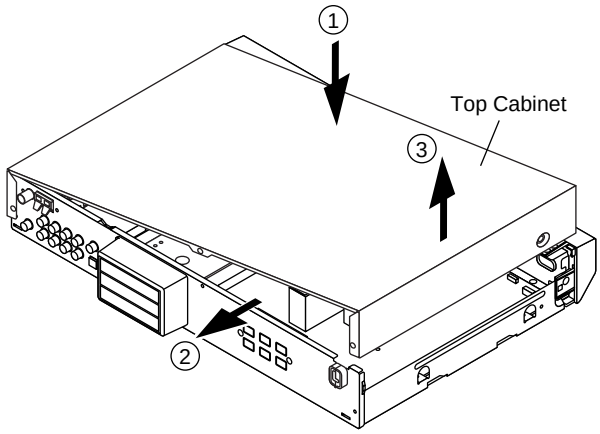


Figure 6-2

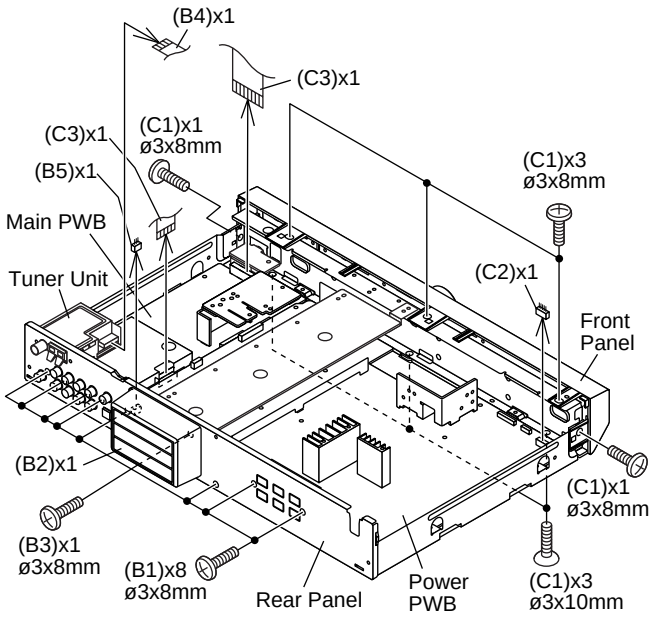


Figure 6-3

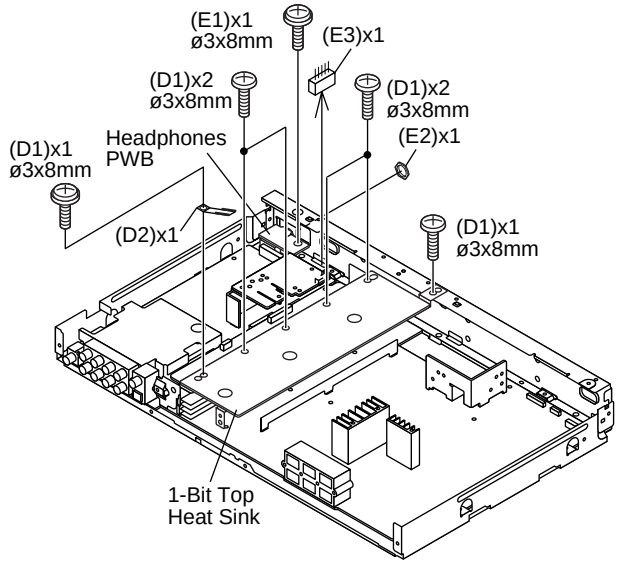


Figure 7-1

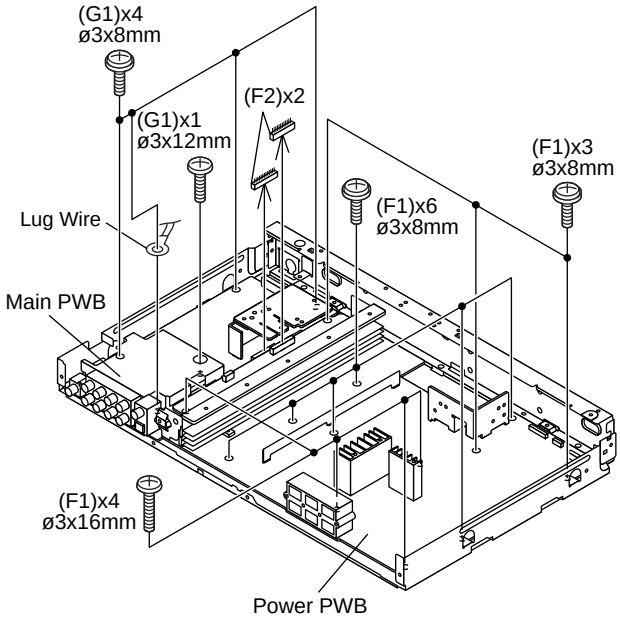


Figure 7-2

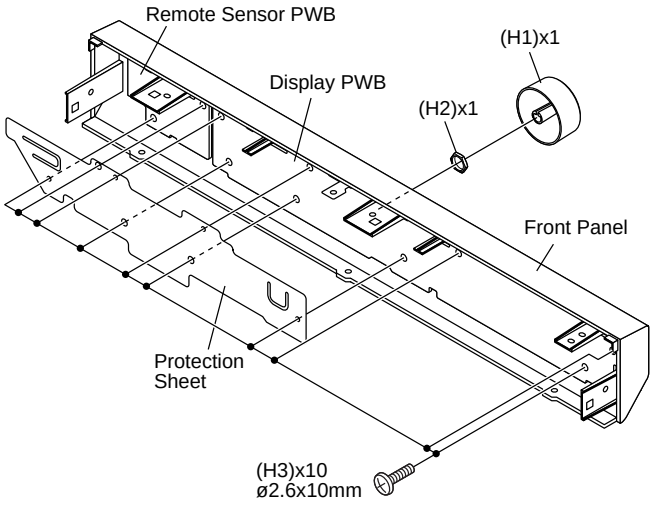


Figure 7-3

CP-AT1000HF/CP-AT1000HC

STEP	REMOVAL	PROCEDURE	FIGURE
1	Front Panel	1. Screw ..... (A1) x6	7-4
2	Speaker	1. Screw ..... (B1) x4	7-5

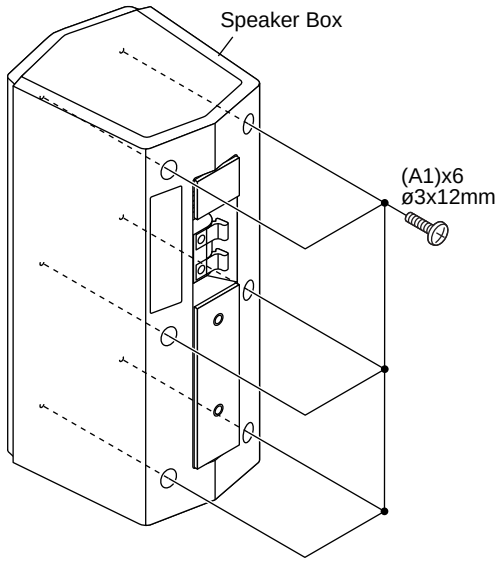


Figure 7-4

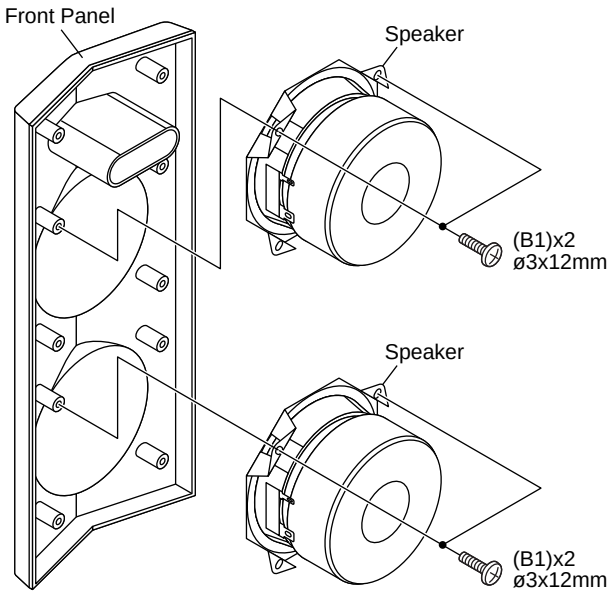


Figure 7-5

SD-AT1000H

CP-AT1000HR

STEP	REMOVAL	PROCEDURE	FIGURE
1	Front Panel	1. Screw ..... (A1) x6	8-1
2	Speaker	1. Screw ..... (B1) x2	8-2

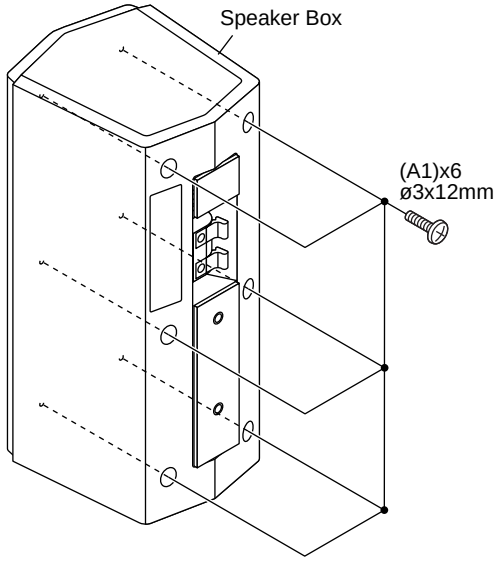


Figure 8-1

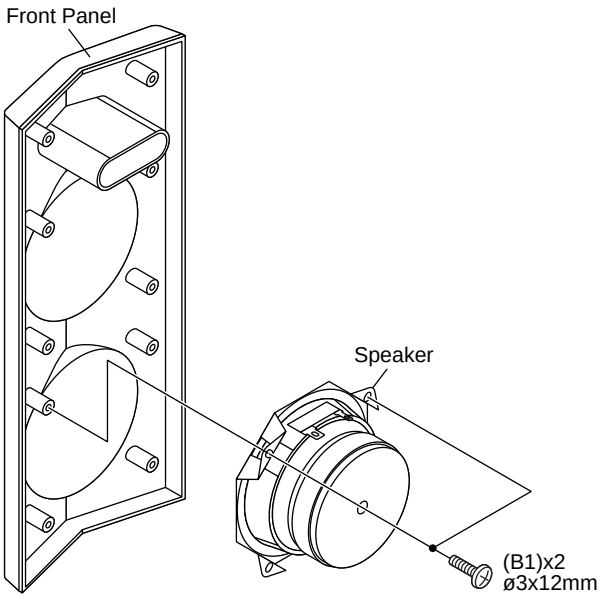


Figure 8-2

CP-AT1000HSW

STEP	REMOVAL	PROCEDURE	FIGURE
1	Woofer	1. Screw ..... (A1) x10 2. Subwoofer Stand .... (A2) x1	8-3

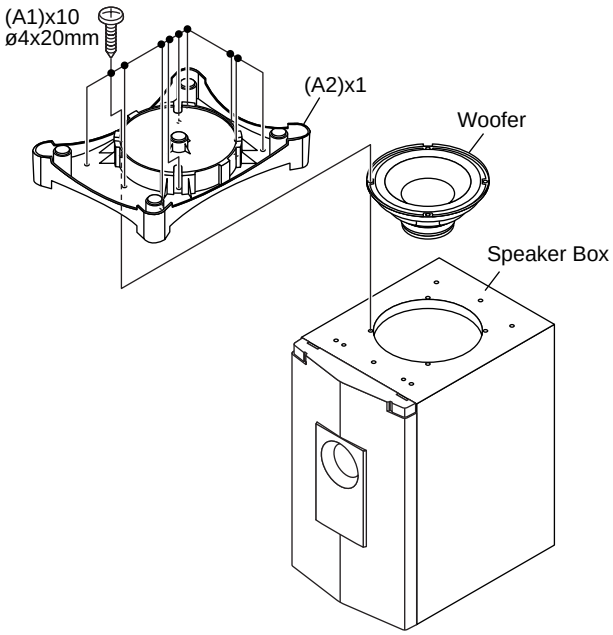


Figure 8-3

ADJUSTMENT

● **1-bit amplifier's output offset voltage adjustment**
Adjust VRA100, VRA101, VRA200, VRA201, VRA300 and VRA301 so that the DC voltage between speaker terminals + and - is set to 0 ± 5 mV at AC 230 V.

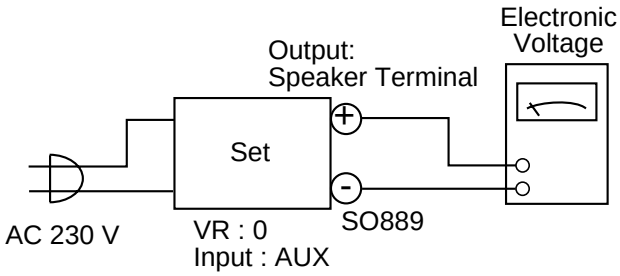


Figure 9-1 OUTPUT OFFSET LEVEL

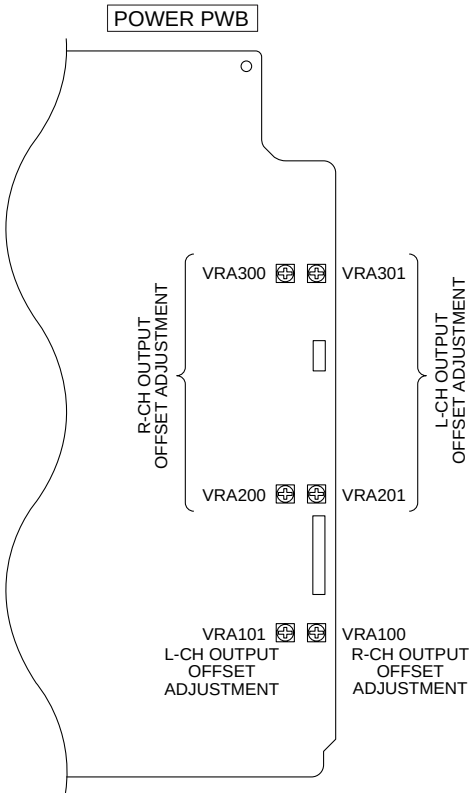


Figure 9-2

DESCRIPTION OF CIRCUIT FOR 1-BIT UNIT (SEE THE WIRING DIAGRAMS ON PAGES 38 AND 39.)

Input section
Signals from CNA100 are coupled by CA100, CA101, CA200, CA300 and CA301, and then sent into the A/D converter IC (ICA100, ICA200, ICA300).

$\Delta\Sigma$ modulation 1-bit converter
Signals from the A/D converter IC (ICA100, ICA200, ICA300) are converted to 1-bit signals and sent differentially. Refer to the technical manual of SM-SX100 for the details of conversion to 1-bit signals.

Low pass filter circuit
1-bit signals switched by the output IC (ICA101, ICA102, ICA201, ICA202, ICA301 and ICA302) are converted to analog signals through the low pass filter consisting of LA104 ~ LA107, LA204 ~ LA207, LA304 ~ LA307 and CA114 ~ CA117, CA214 ~ CA217, and CA314 ~ CA317. The low pass filter functions when a frequency exceeds 20 kHz, and reduces it by approx. 3 dB when it reaches approx. 40 kHz.

Dynamic feedback circuit
The 1-bit signals switched by the output IC (ICA101, ICA102, ICA201, ICA202, ICA301 and ICA302) oscillate between positive and negative voltage. After resistance-division, the signals are fed back to the A/D converter IC (ICA100, ICA200, ICA300) through NF resistance 75 kohms (RA155 ~ RA158, RA255 ~ RA258, RA355 ~ RA358). The peak-to-peak voltage reaches approx. 5 V.

TO CHECK AND CANCEL PROTECT CIRCUIT DETECTION LINE

1: In this model the microcomputer (IC701) detects the following malfunctions once power is supplied, and cuts off power from all the parts except for the circuit driving the microcomputer.
   ① Abnormal drop in the output voltage of each regulator (below approx. 1.5 V)
   Power is cut off instantly without display.
   ② Output offset over voltage of the 1-bit amplifier (above approx. DC 2 V)
   ③ Mains overvoltage of the 1-bit amplifier (above approx. DC 5.5 A)
   Power is cut off instantly without display.
   ④ Defects in the cooling fan or its drive circuit (when stopped)
   Power is cut off after “FAN LOCK” is displayed.
   ⑤ Abnormal overvoltage or undervoltage of power supply.
   Power is cut off instantly without display if voltage is abnormal.

2: Criteria for abnormality, and checking and cancelling the detection line
   The criteria:
   ① The voltage of pin 2 (PROTECT) on IC701.
   ② The voltage of pin 7 (OFFSET) on IC701: Low (below approx. 1 V) (abnormal) and High (above approx. 2.5 V) (normal) .
   ③ Detected as abnormal if a pulse signal is not input into the pin 1 (FAN LOCK) for 5 seconds.
   ④ Detected as abnormal if the voltage of the pin 3 (+B CHECK) is lower than 1.2 V or higher than 3.0 V.

   Checking and cancelling the detection line:
   Caution: If the PROTECT/OFFSET detection line is disconnected in case of ①, ② or ③ above, a protective operation does not function. The disconnection by output short-circuit of each regulator may cause the parts or PCBs to burn out and therefore do not disconnect the detection line when the cause is not identified.
   (Power supply can be detected with an oscilloscope or like during approx. 0.5 seconds after an abnormality is found. Note that the detection would be difficult with a tester as the voltage rises and falls rapidly.)

① Abnormal drop in the output voltage of each regulator
Connect a measuring device (such as an oscilloscope) to the stabilizing output of the regulator, and turn on the unit. If the detected voltage is extremely lower than the voltage on the circuit diagram (below approx. 1.5 V), the regulator itself or the circuit is defective.

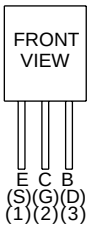
② Output offset overvoltage of the 1-bit amplifier
Adjust the voltage of the output offset. If a protective operation is still activated, ICA401 on the 1-bit amplifier could be defective (the detection circuit of the speaker output DC voltage).

NOTES ON SCHEMATIC DIAGRAM

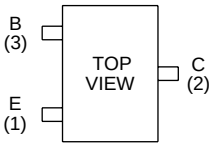
- Resistor:
  To differentiate the units of resistors, such symbol as K and M are used: the symbol K means 1000 ohm and the symbol M means 1000 kohm and the resistor without any symbol is ohm-type resistor. Besides, the one with “Fusible” is a fuse type.
- Capacitor:
  To indicate the unit of capacitor, a symbol P is used: this symbol P means pico-farad and the unit of the capacitor without such a symbol is microfarad. As to electrolytic capacitor, the expression “capacitance/withstand voltage” is used.
  (CH), (TH), (RH), (UJ): Temperature compensation
  (ML): Mylar type
  (P.P.): Polypropylene type
- Schematic diagram and Wiring Side of P.W.Board for this model are subject to change for improvement without prior notice.
- The indicated voltage in each section is the one measured by Digital Multimeter between such a section and the chassis with no signal given.
- Parts marked with “ ⚠ ” (⊏ ⚌ ⚌ ⚌ ⊐) are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

REF. NO	DESCRIPTION	POSITION
JOG701	JOG VOLUME	ON—OFF
SW701	DIGITAL	ON—OFF
SW702	LINE	ON—OFF
SW703	TUNER (BAND)	ON—OFF
SW704	TUNING UP	ON—OFF
SW705	TUNING DOWN	ON—OFF
SW706	POWER	ON—OFF

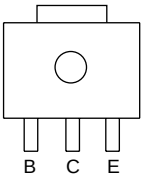
TYPES OF TRANSISTOR AND LED



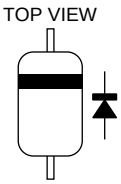
KTA1023 Y KRA102 M
KTA1266 GR KRC102 M
KTA1273 Y KRC104 M
KTC3199 GR KRC106 M
KTC3203 Y KRC107 M



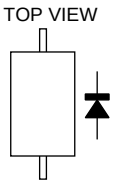
2SB709 AR
2SD601 AR
2SK208
CPH3418
KRA106 S
KRA107 S
KRC102 S
KRC104 S
KRC107 S
KTC2875 B



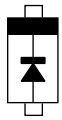
2SC5565
KTC4375 Y



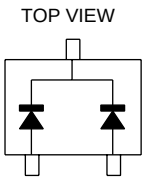
AG01Z
AK09
DS1SS133
EK03
EK19
GD1N4004



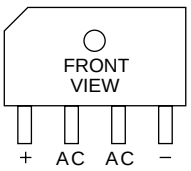
SFPW56



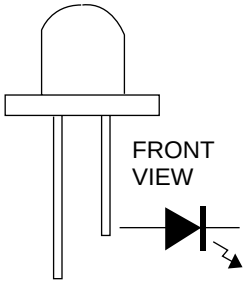
MA111



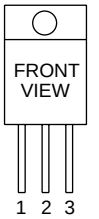
KDS120E
KDS121E
KDS226



D5SB60

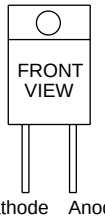


304AT2E
304BC2E9
304GT1U
304VT2E2
304VT2E3



1. Anode
2. No Contact
3. Cathode

SARS03



FMLG22S

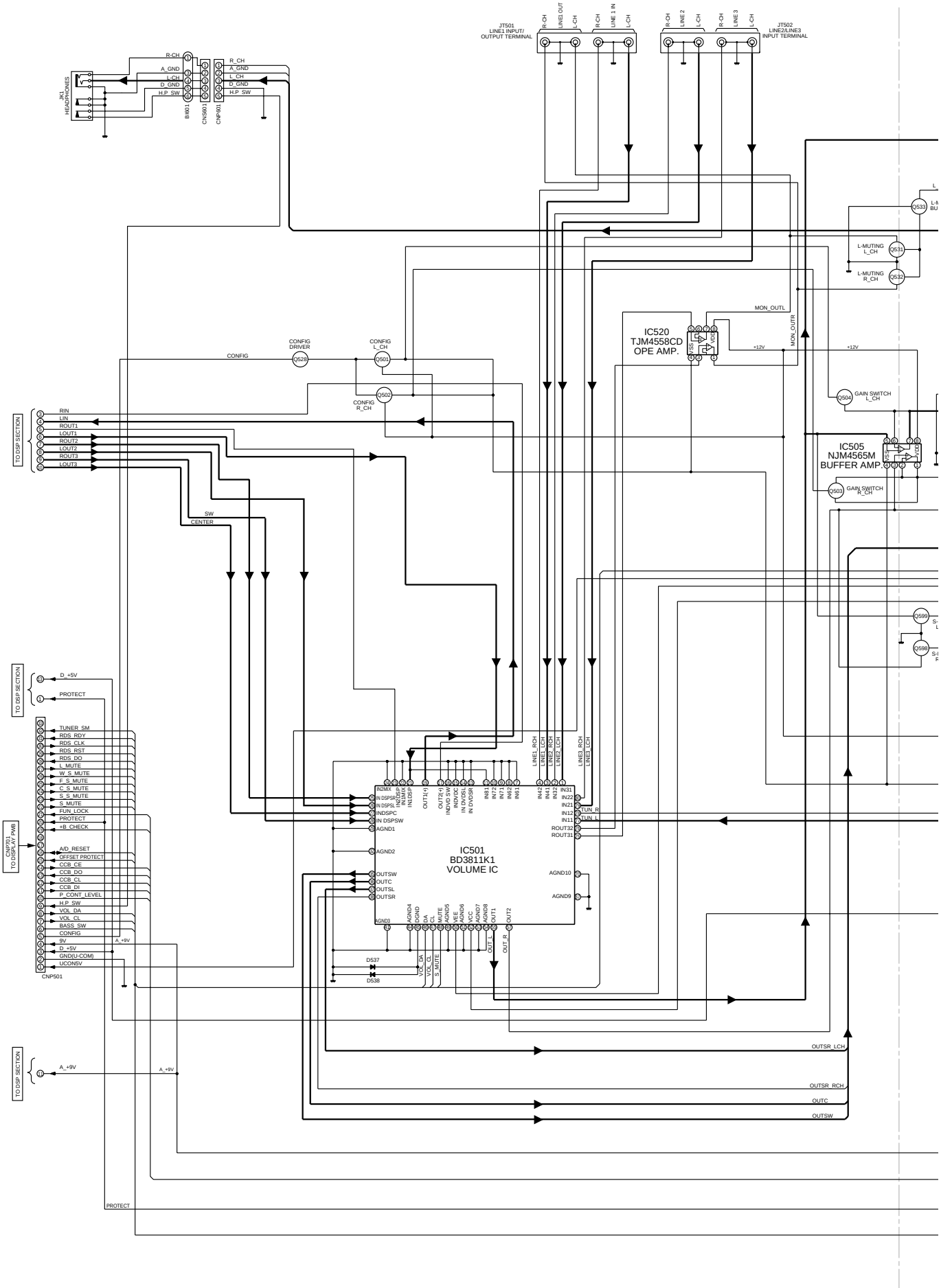


Figure 12 BLOCK DIAGRAM (1/10)

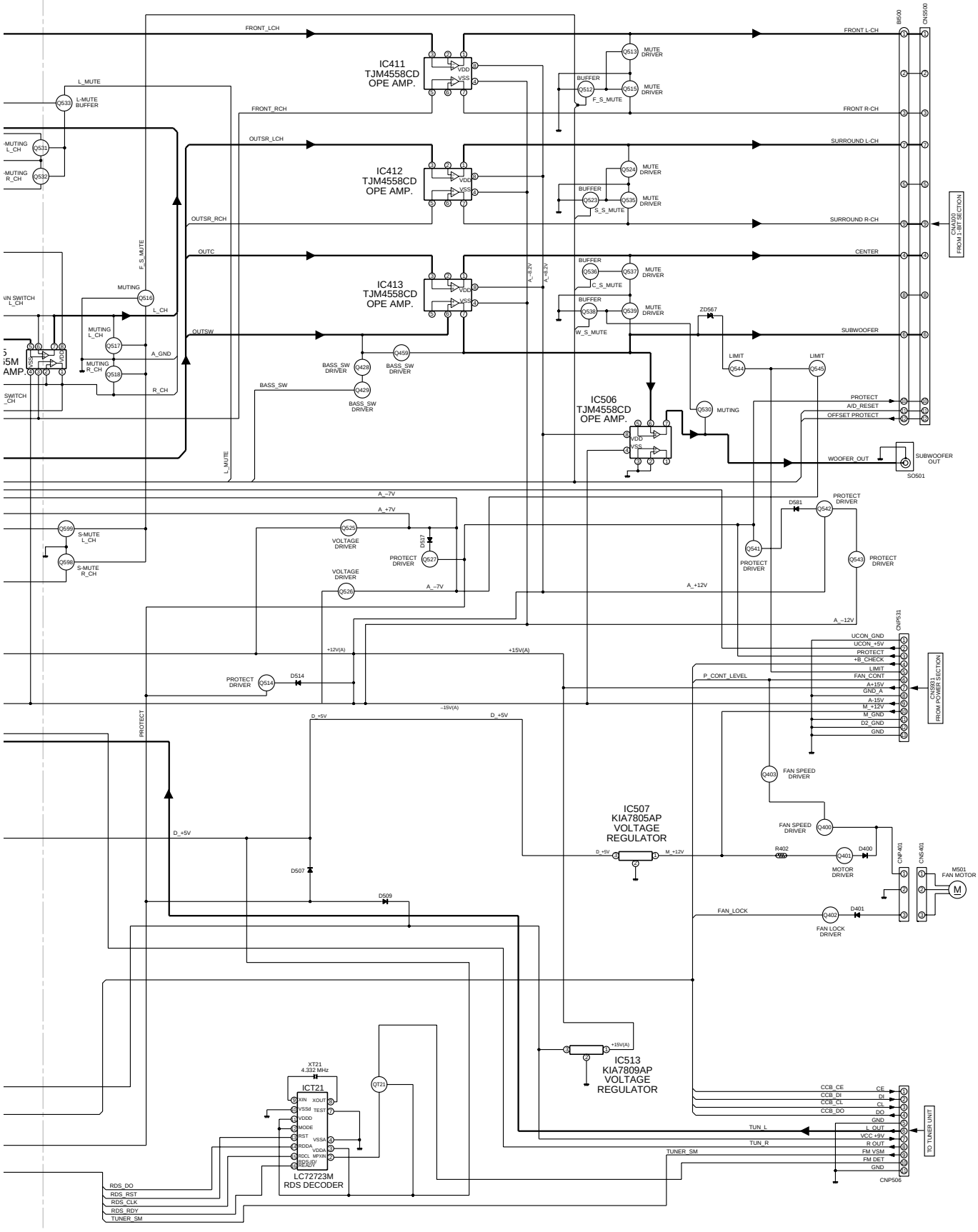


Figure 13 BLOCK DIAGRAM (2/10)

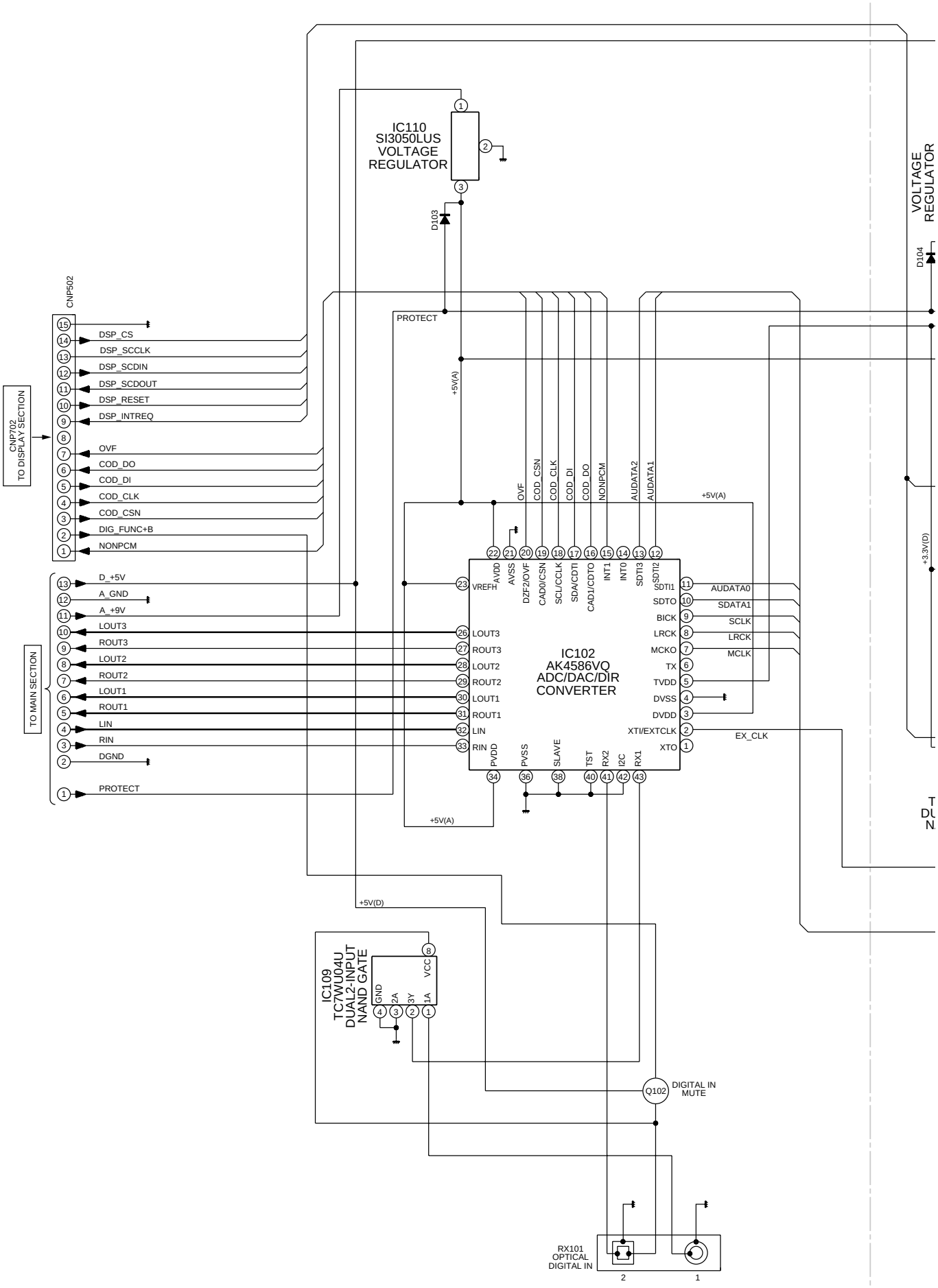


Figure 14 BLOCK DIAGRAM (3/10)

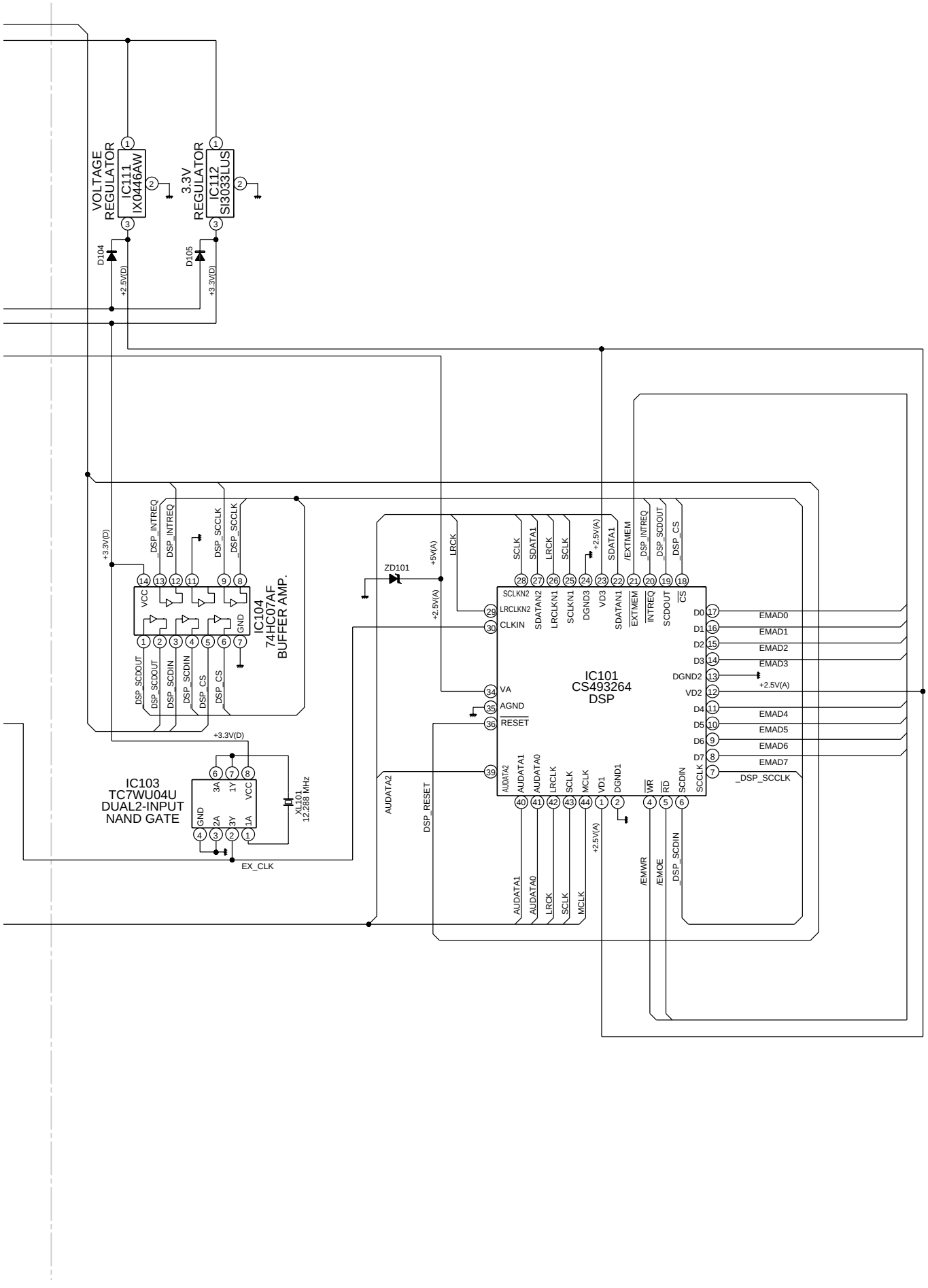


Figure 15 BLOCK DIAGRAM (4/10)

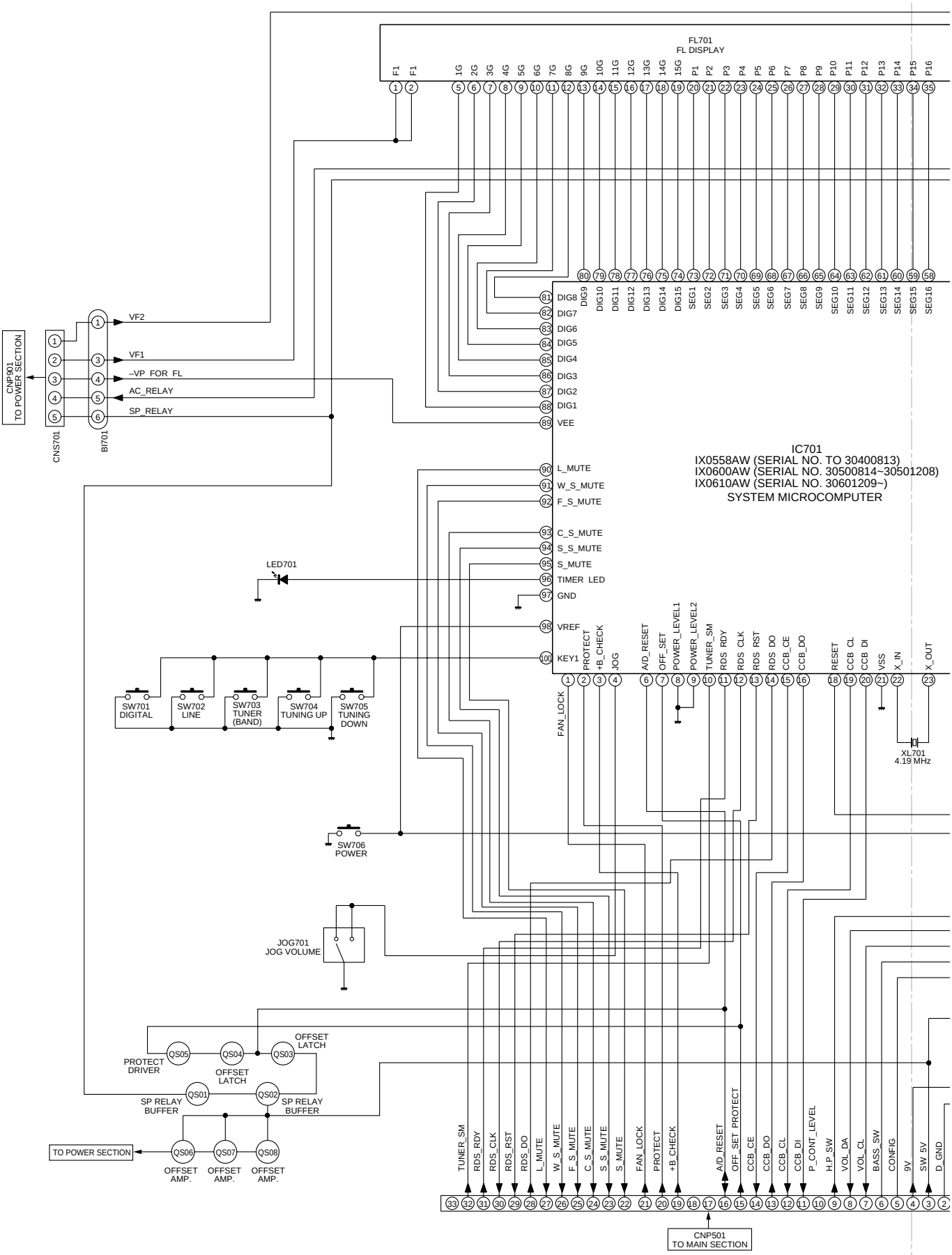


Figure 16 BLOCK DIAGRAM (5/10)

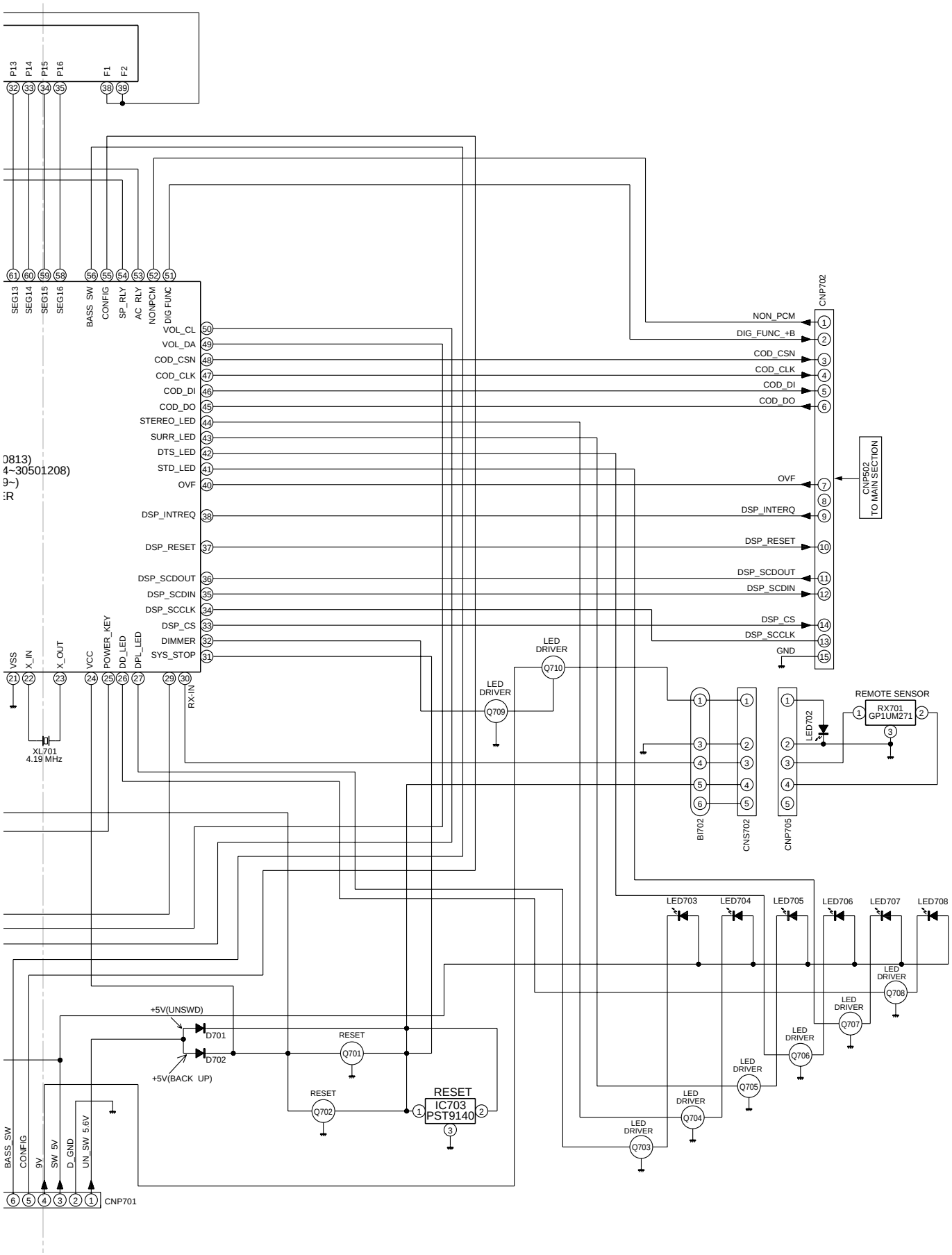


Figure 17 BLOCK DIAGRAM (6/10)

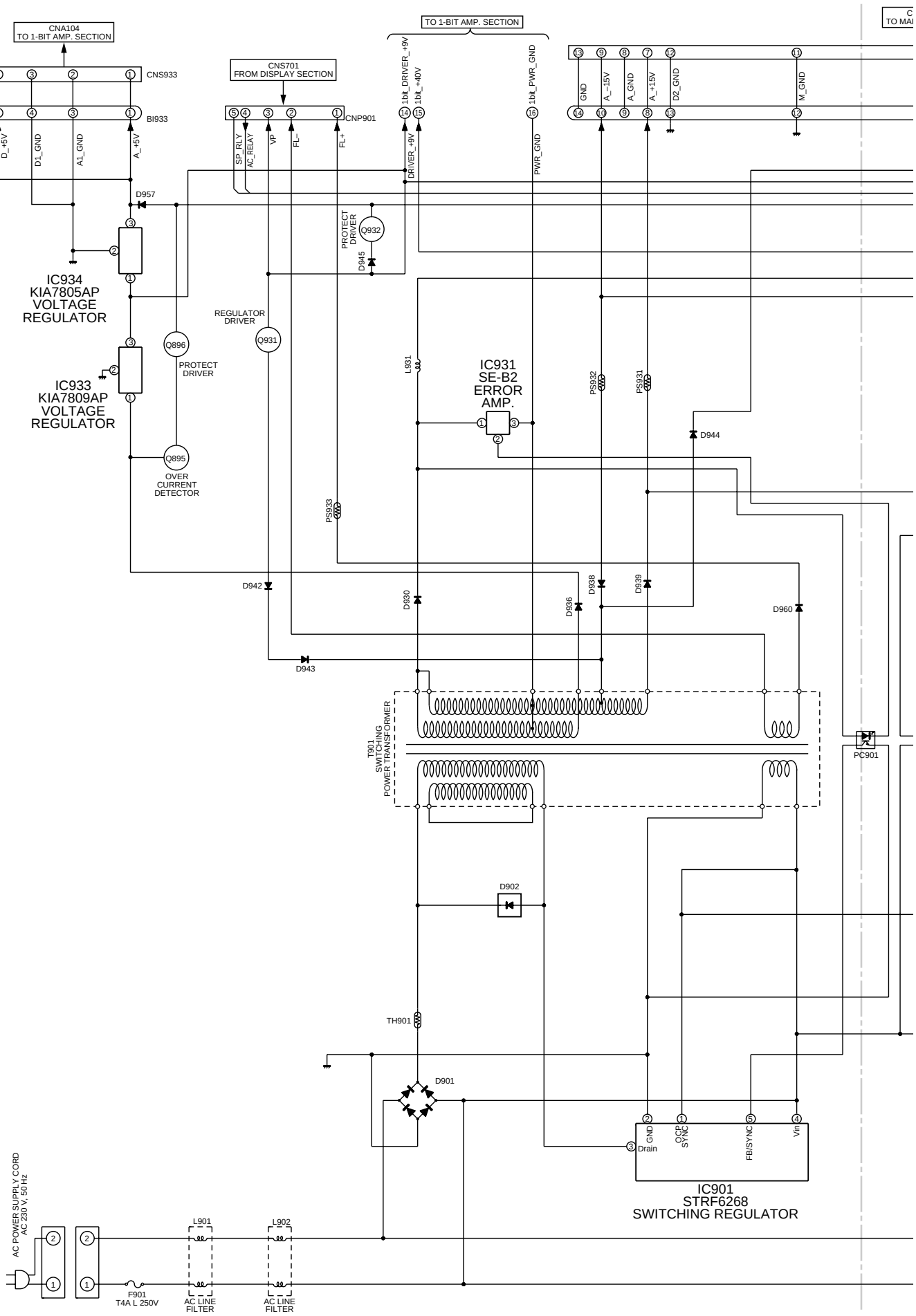


Figure 18 BLOCK DIAGRAM (7/10)

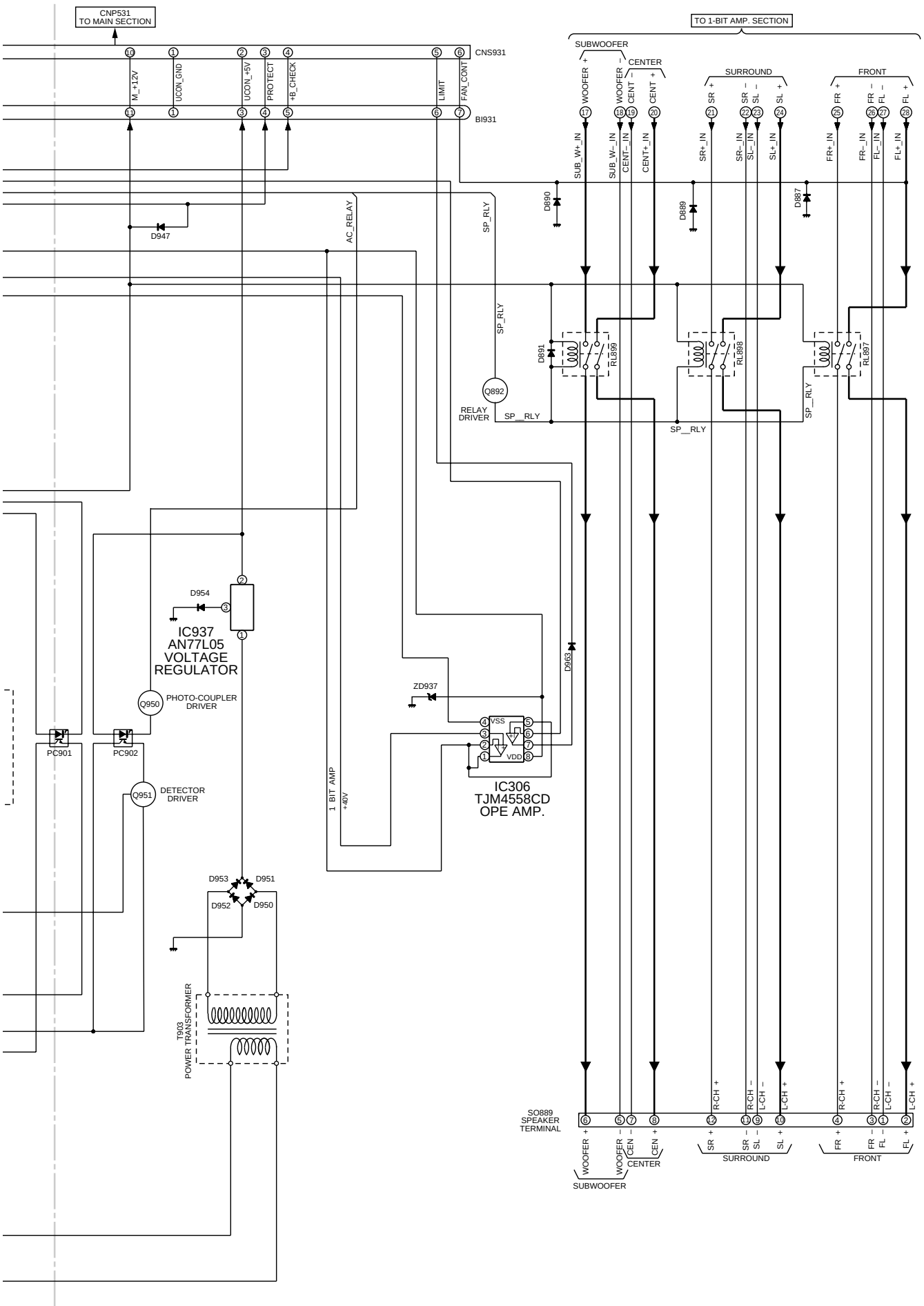


Figure 19 BLOCK DIAGRAM (8/10)

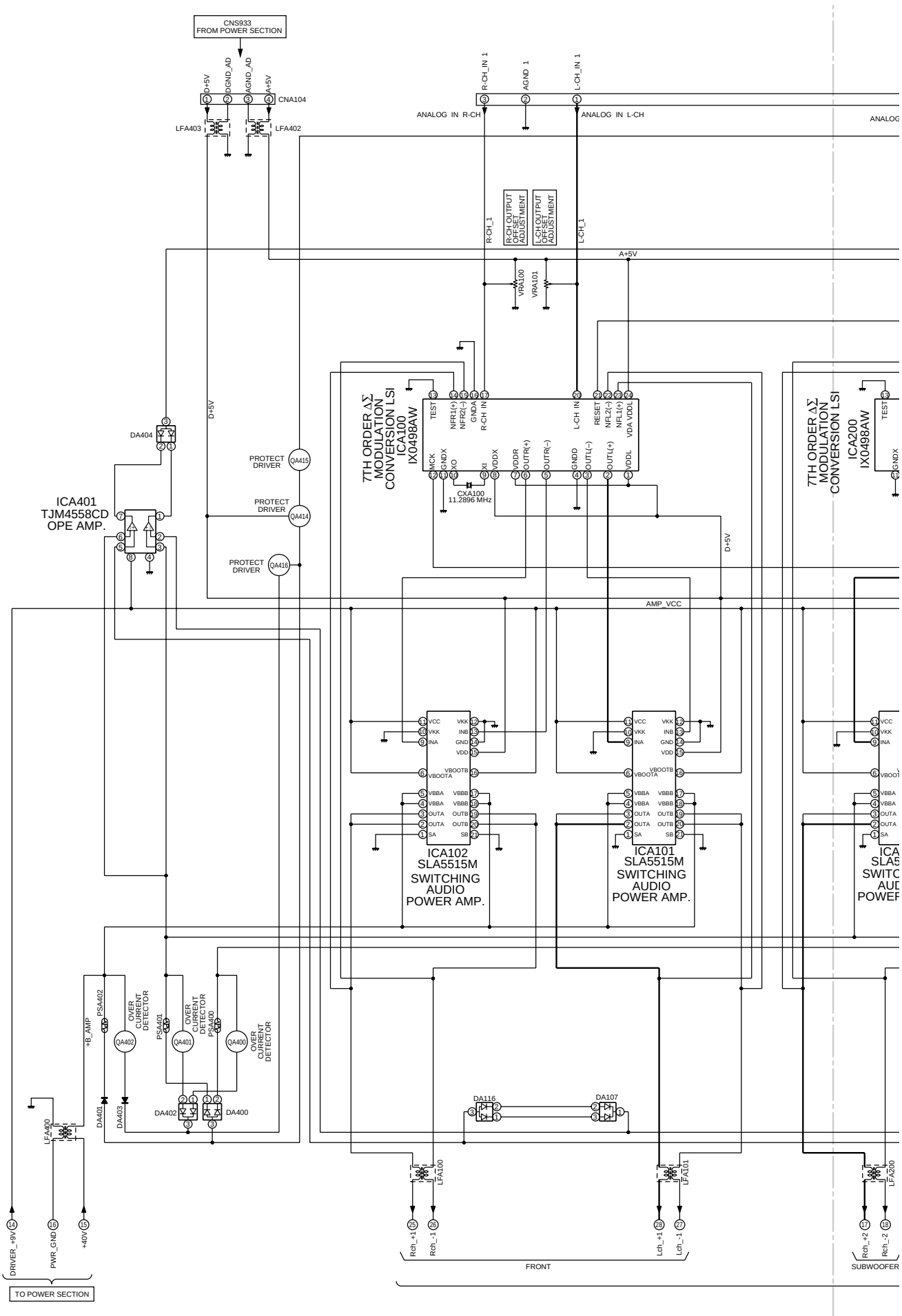


Figure 20 BLOCK DIAGRAM (9/10)

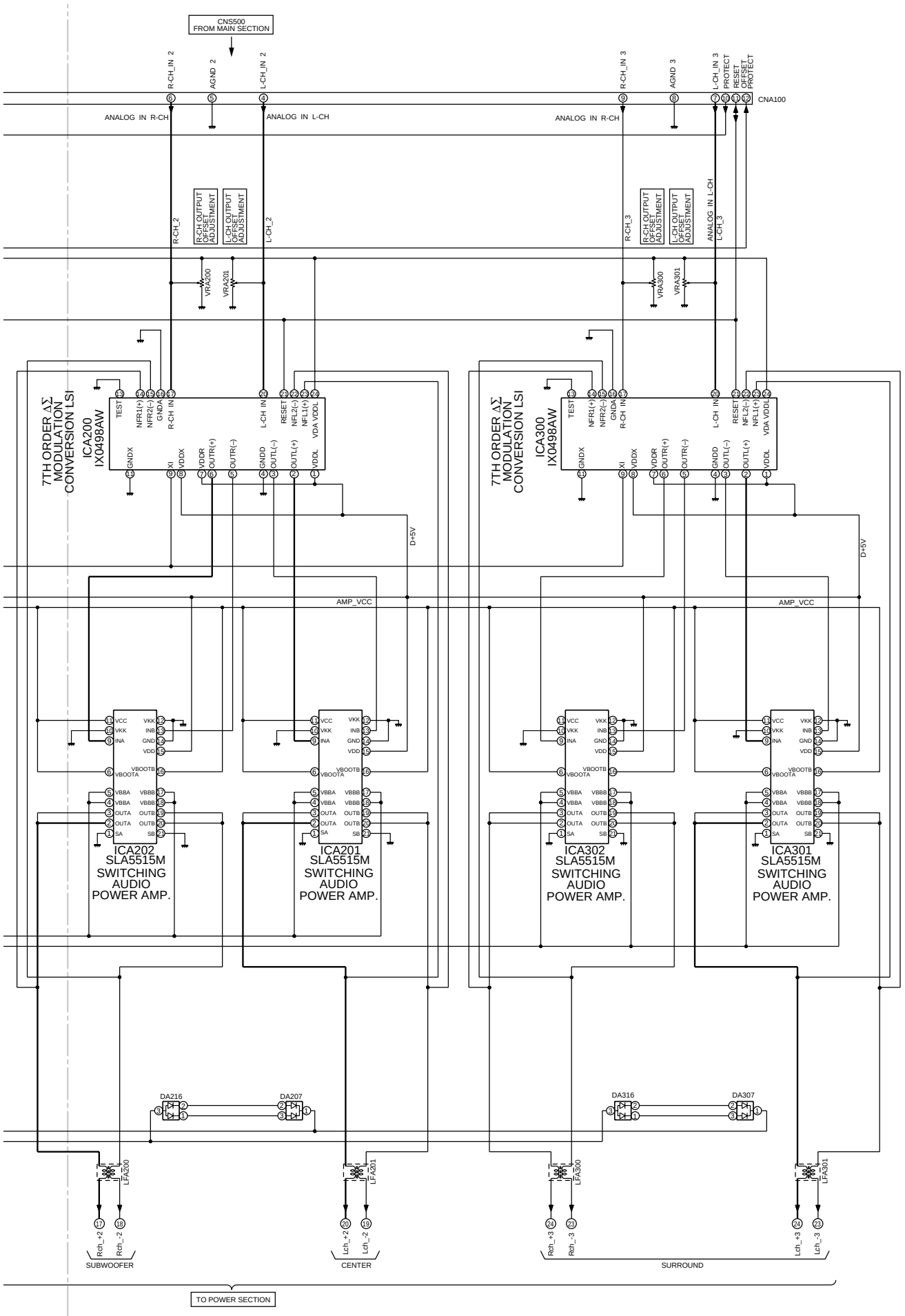


Figure 21 BLOCK DIAGRAM (10/10)

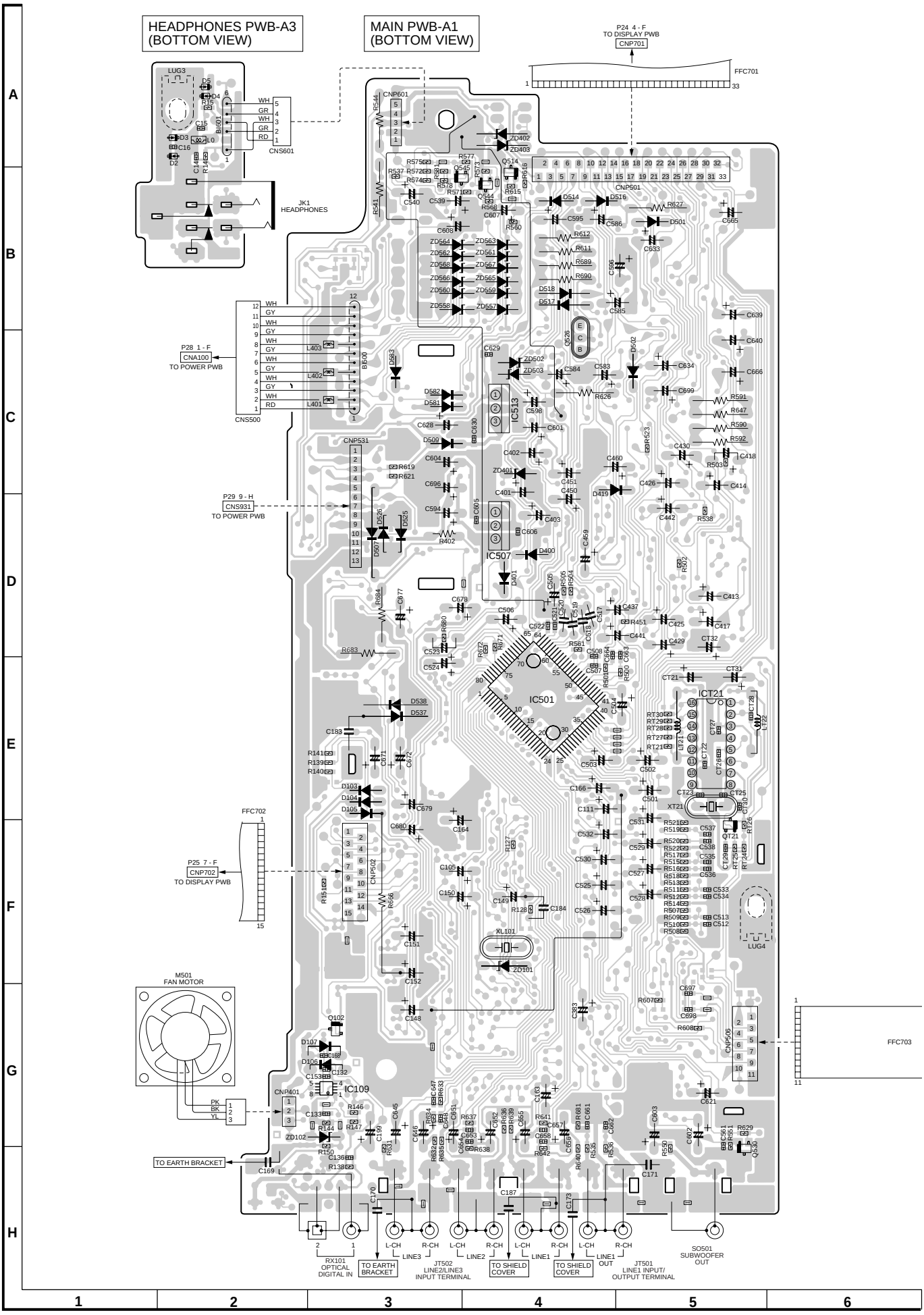
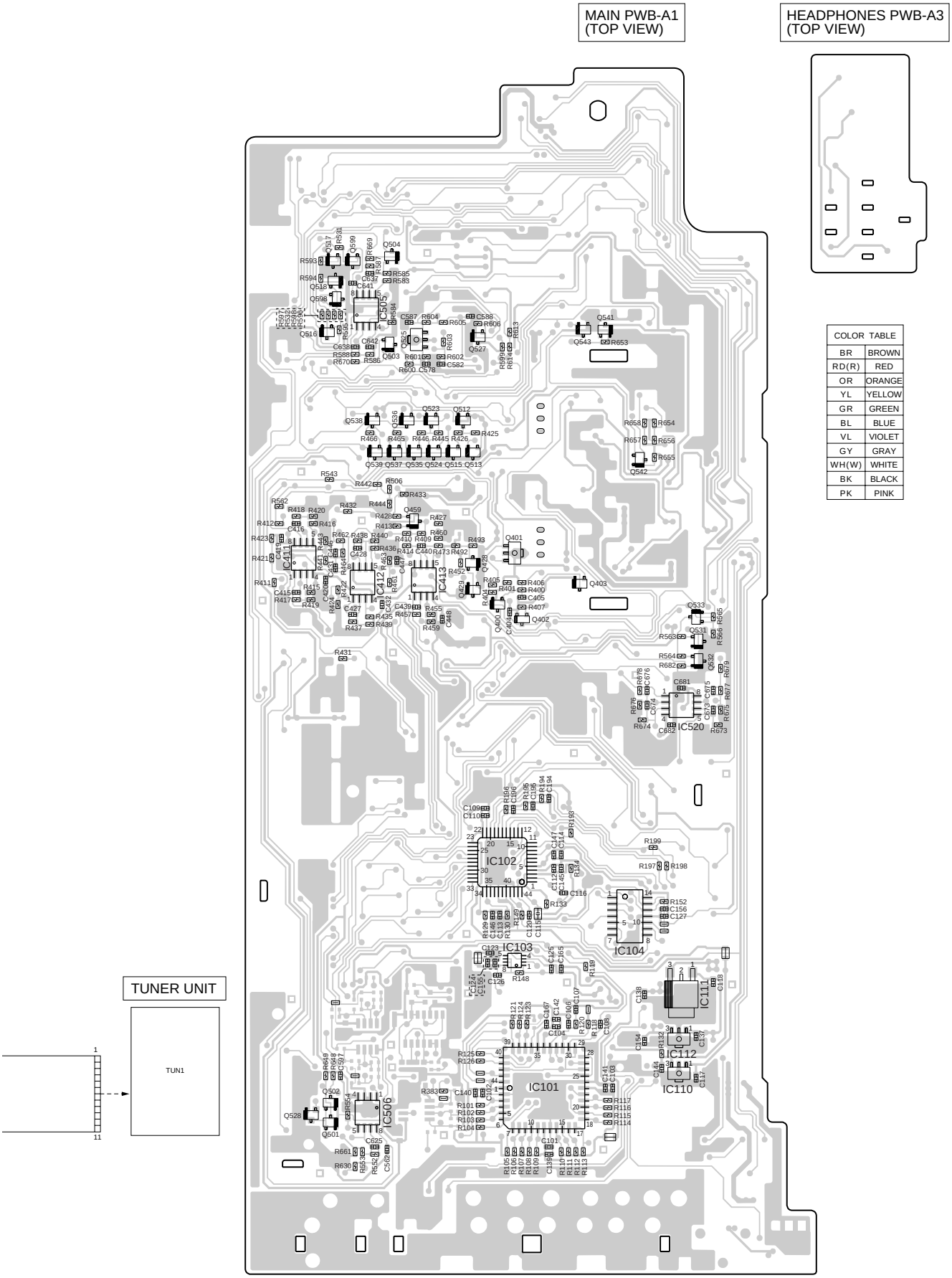
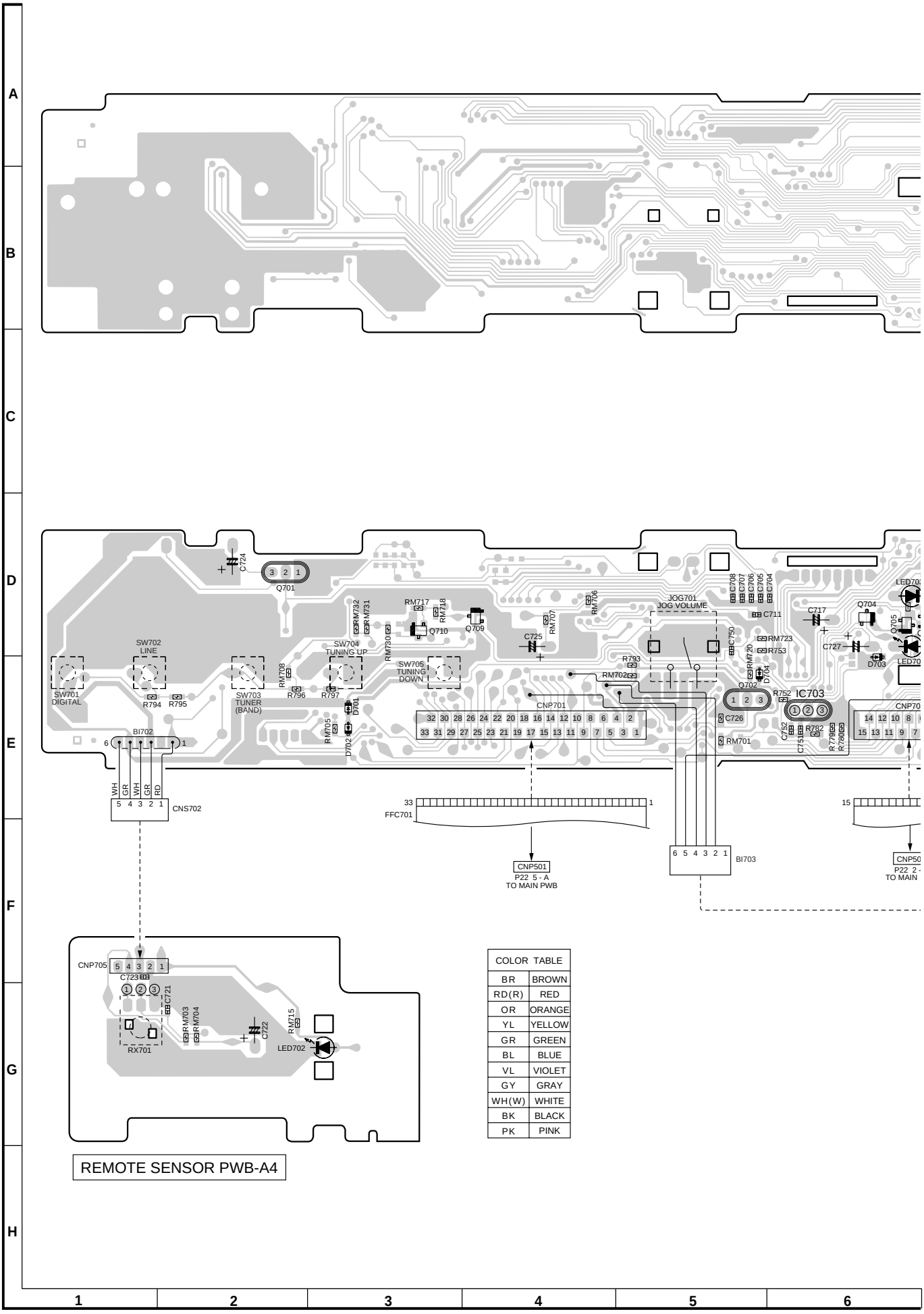


Figure 22 WIRING SIDE OF P.W.BOARD (1/8)



7	8	9	10	11	12

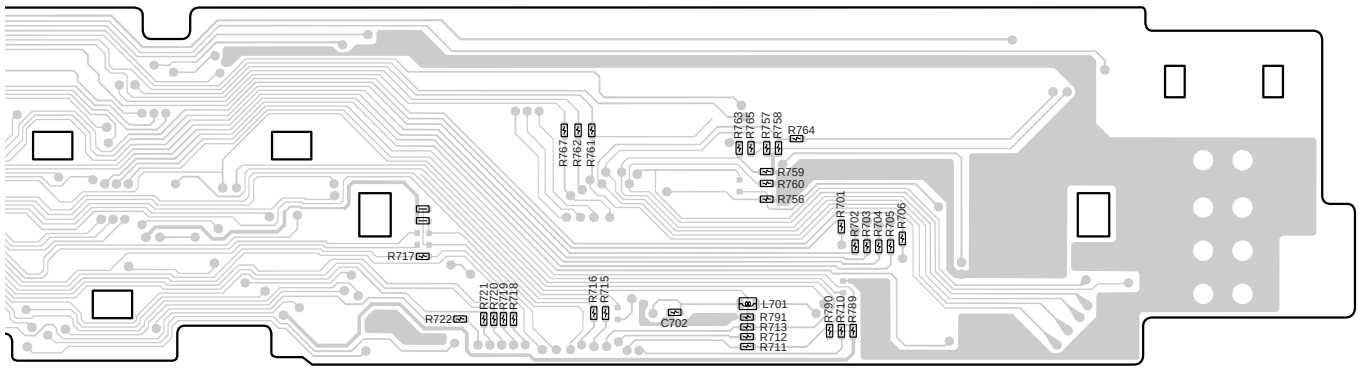
Figure 23 WIRING SIDE OF P.W.BOARD (2/8)



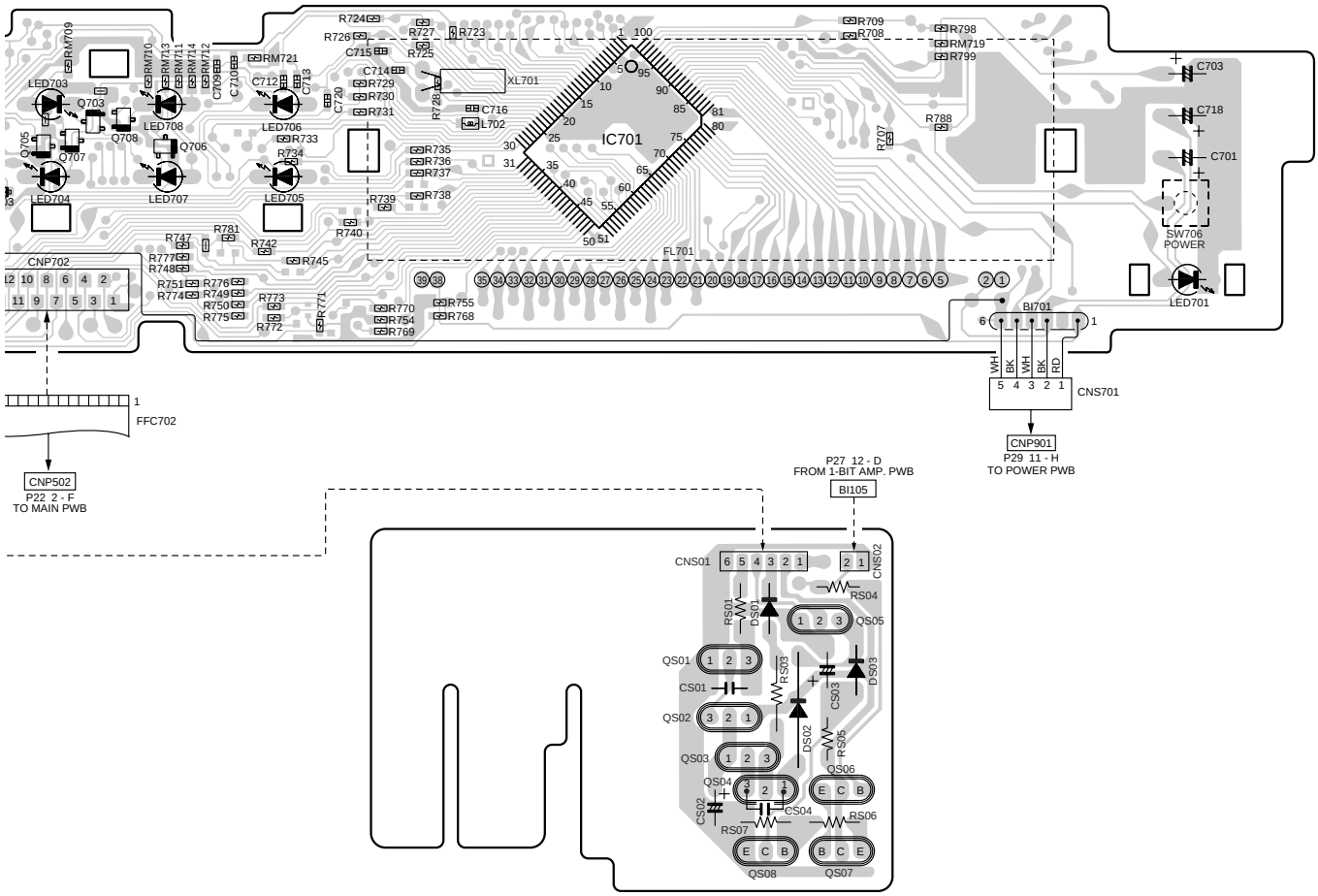
COLOR TABLE	
BR	BROWN
RD(R)	RED
OR	ORANGE
YL	YELLOW
GR	GREEN
BL	BLUE
VL	VIOLET
GY	GRAY
WH(W)	WHITE
BK	BLACK
PK	PINK

Figure 24 WIRING SIDE OF P.W.BOARD (3/8)

DISPLAY PWB-A2 (TOP VIEW)



DISPLAY PWB-A2 (BOTTOM VIEW)

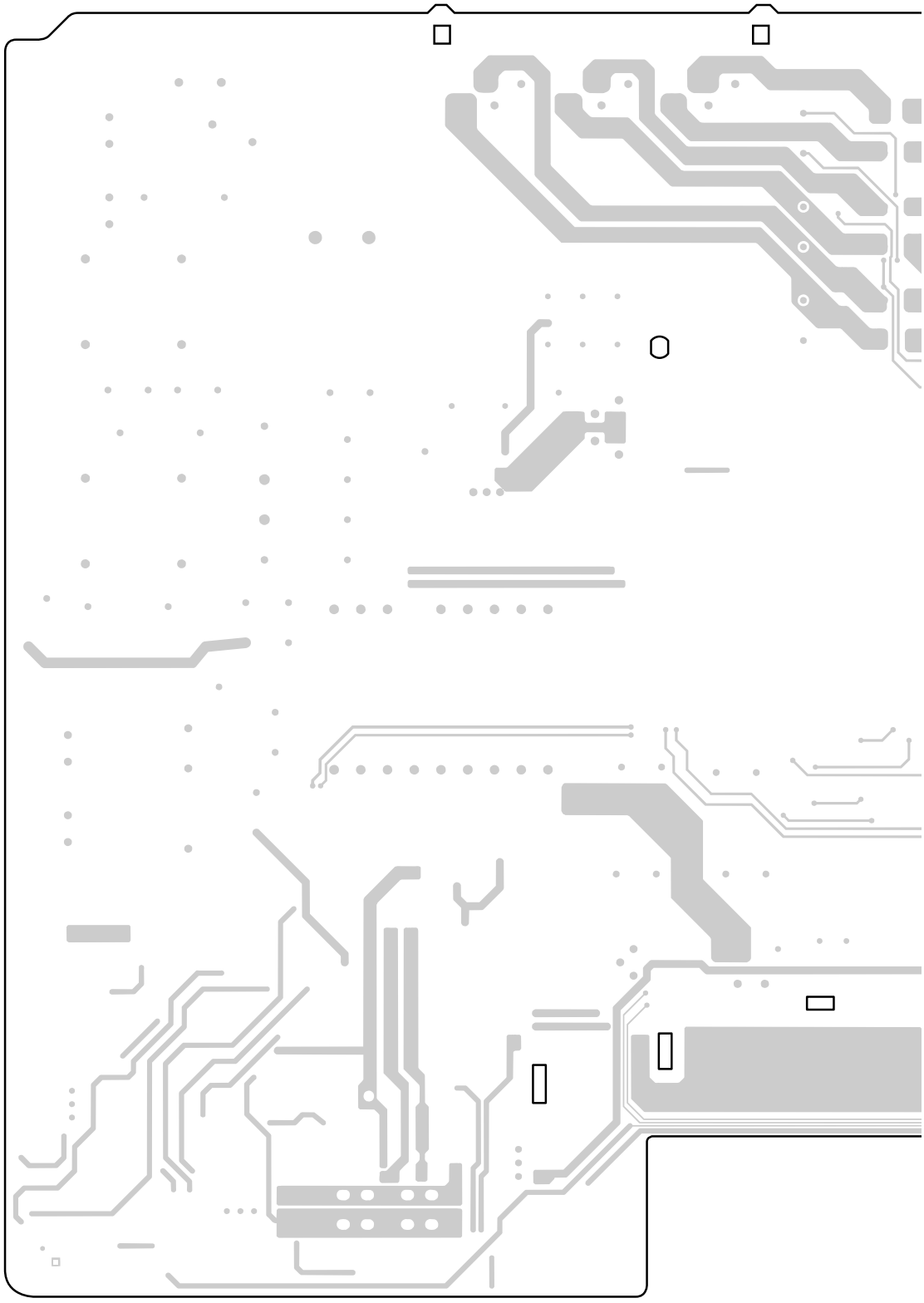


PROTECT CIRCUIT PWB-C

7	8	9	10	11	12

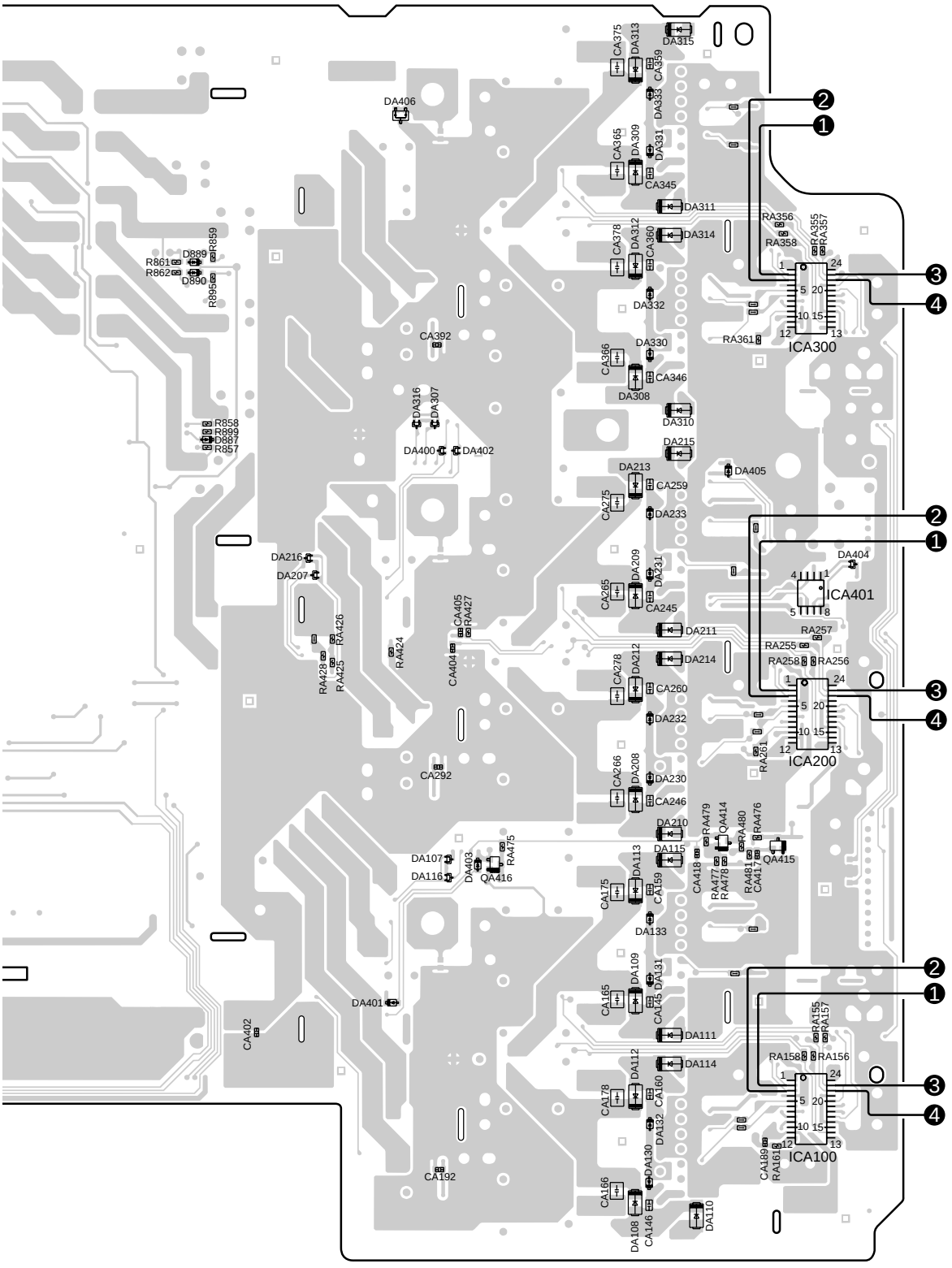
Figure 25 WIRING SIDE OF P.W.BOARD (4/8)

POWER PWB-B (TOP VIEW)



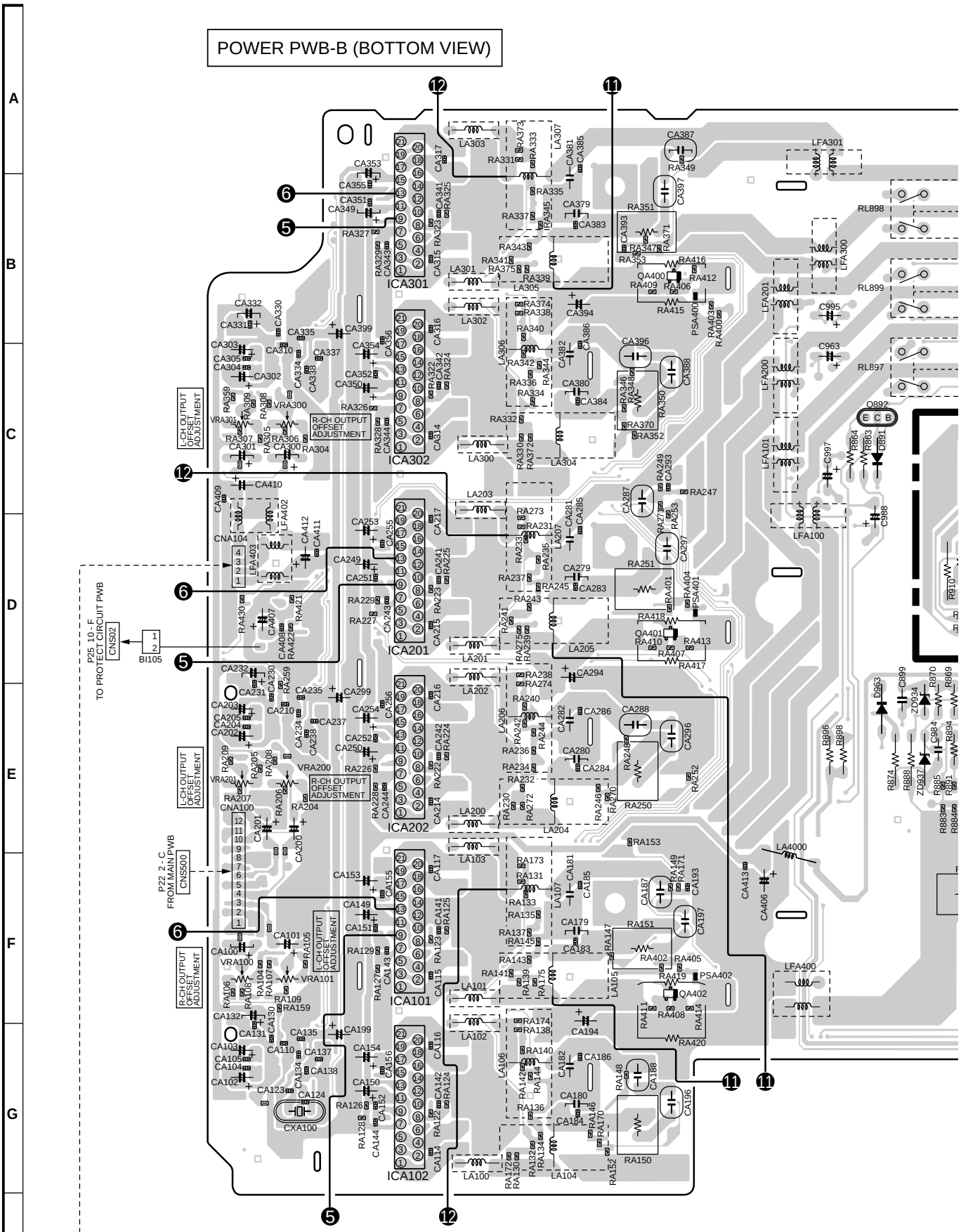
• The numbers ❶ to ❹ are waveform numbers shown in page 42.

Figure 26 WIRING SIDE OF P.W.BOARD (5/8)



7	8	9	10	11	12

Figure 27 WIRING SIDE OF P.W.BOARD (6/8)



COLOR TABLE	BR	RD(R)	OR	YL	GR	BL	VL	GY	WH(W)	BK	PK
	BROWN	RED	ORANGE	YELLOW	GREEN	BLUE	VIOLET	GRAY	WHITE	BLACK	PINK

• The numbers ❺, ❻, ⓫, ⓬ are waveform numbers shown in page 42.

Figure 28 WIRING SIDE OF P.W.BOARD (7/8)

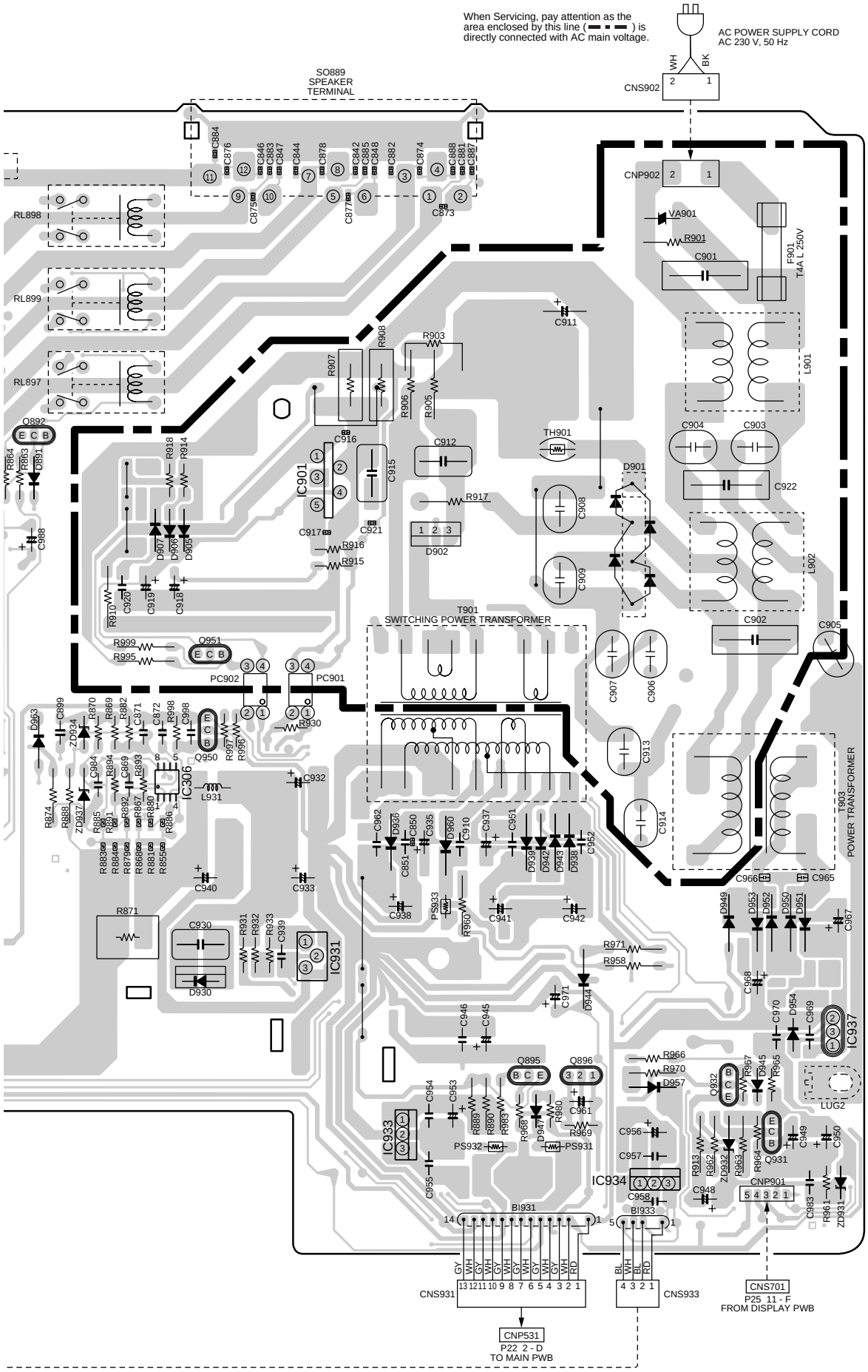


Figure 29 WIRING SIDE OF P.W.BOARD (8/8)

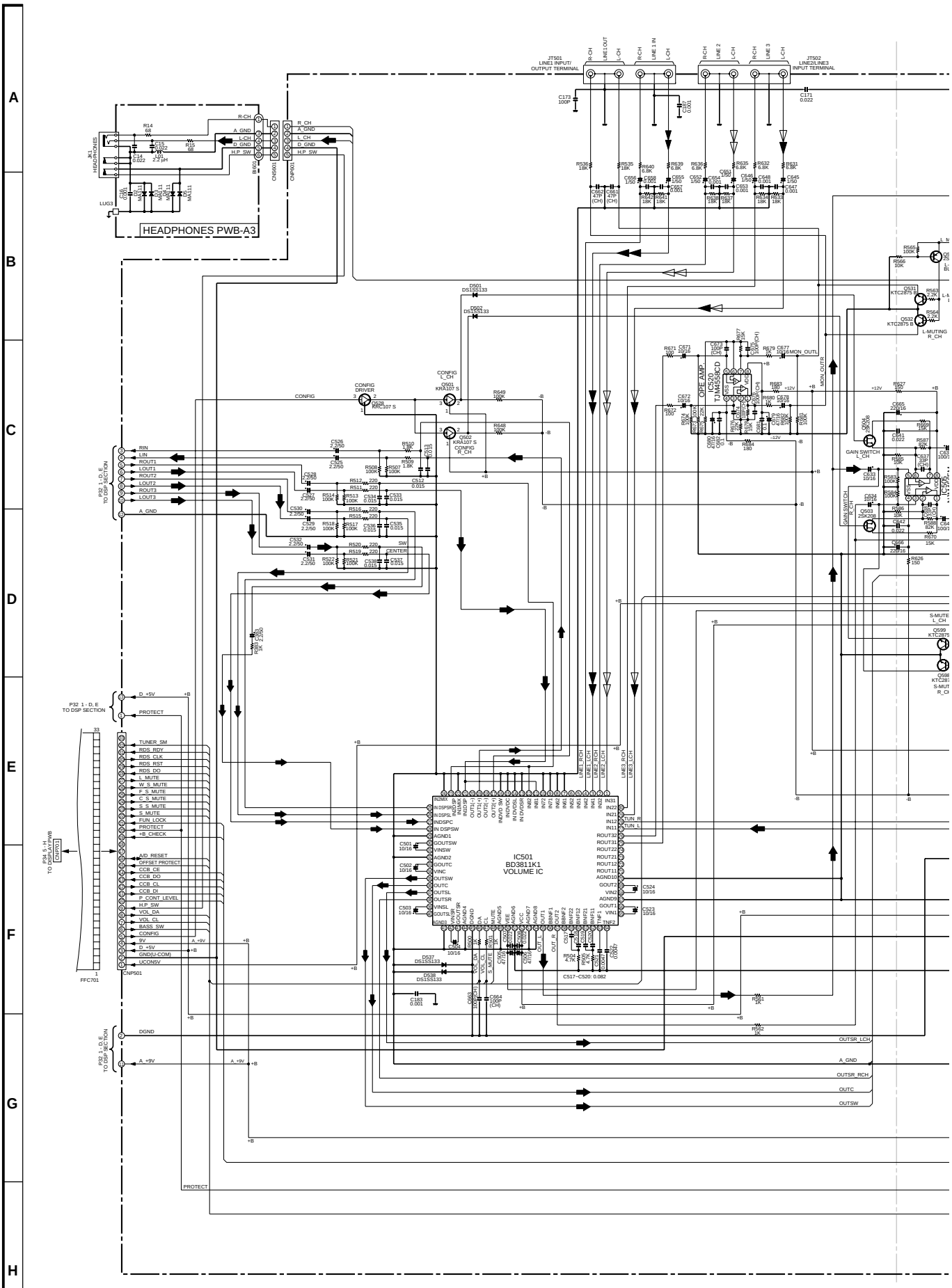
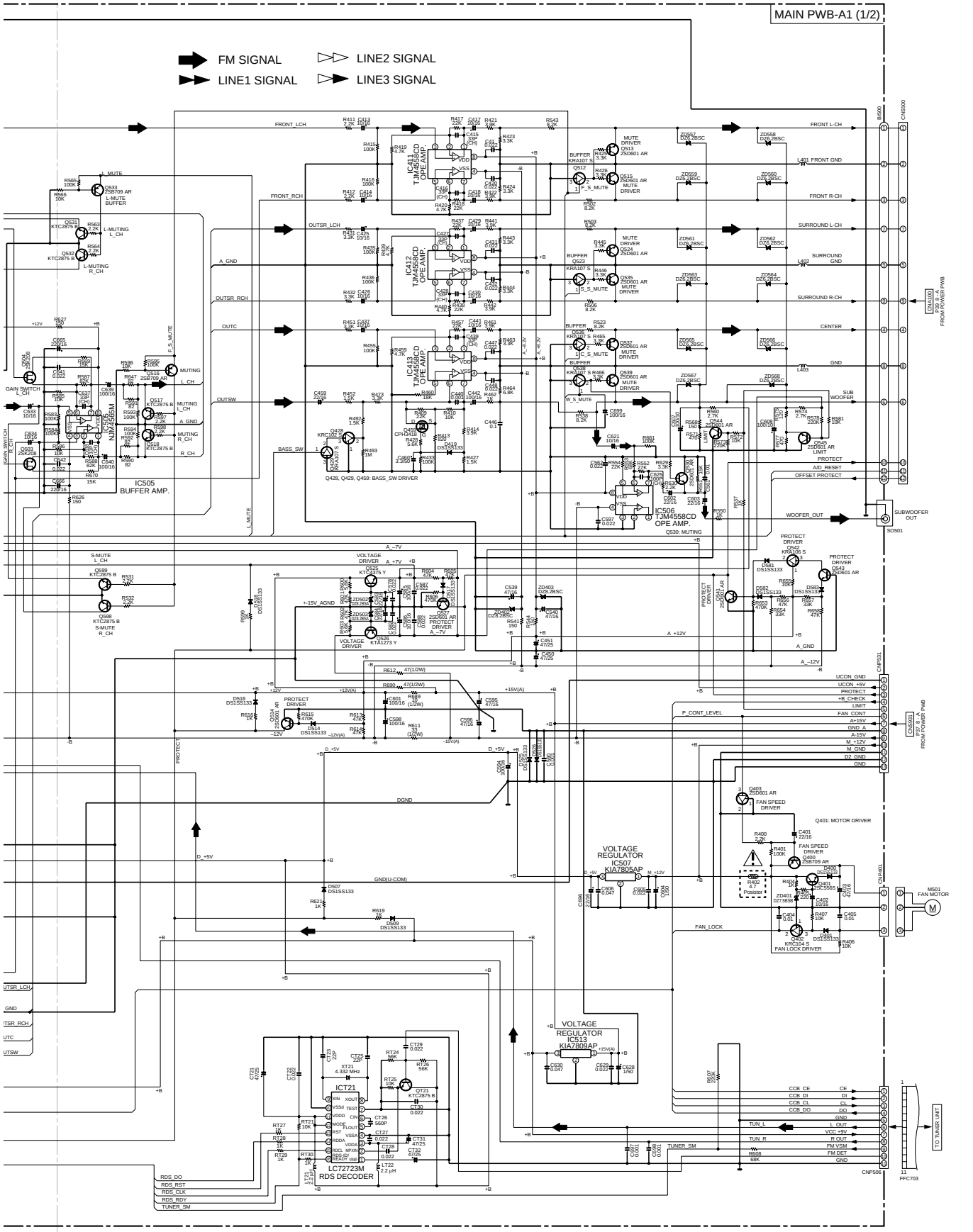
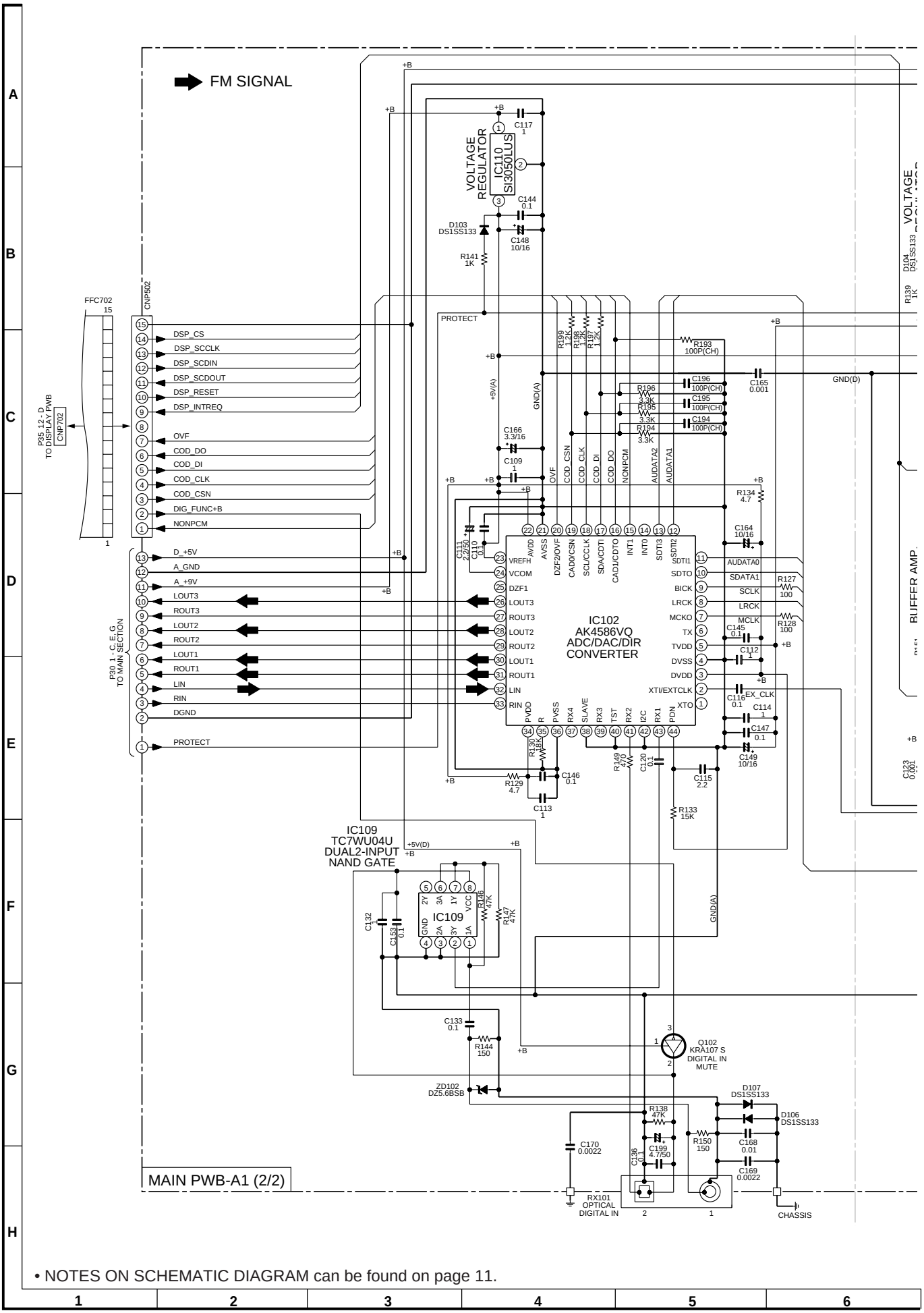


Figure 30 SCHEMATIC DIAGRAM (1/11)



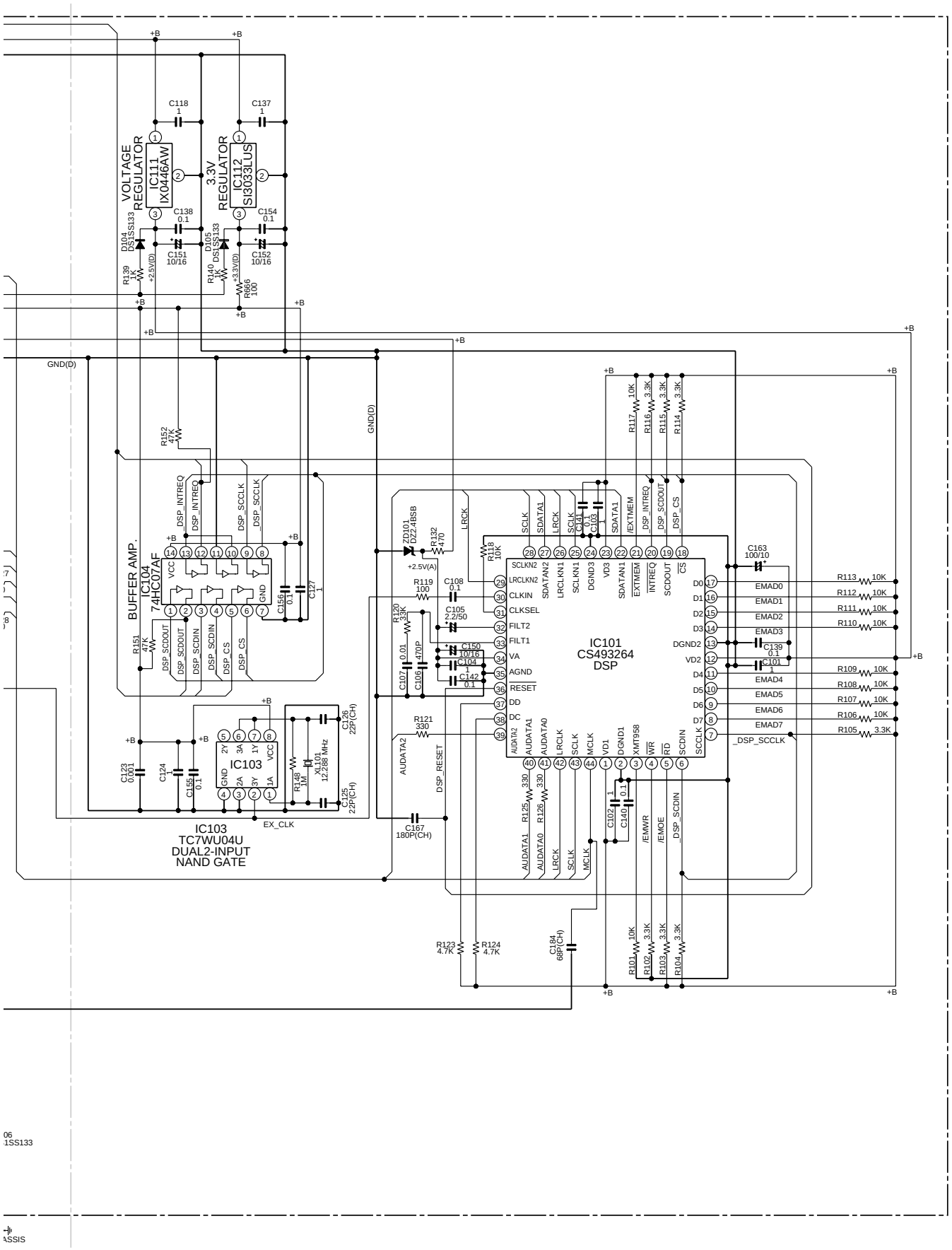
7	8	9	10	11	12

Figure 31 SCHEMATIC DIAGRAM (2/11)



• NOTES ON SCHEMATIC DIAGRAM can be found on page 11.

Figure 32 SCHEMATIC DIAGRAM (3/11)



7	8	9	10	11	12

Figure 33 SCHEMATIC DIAGRAM (4/11)

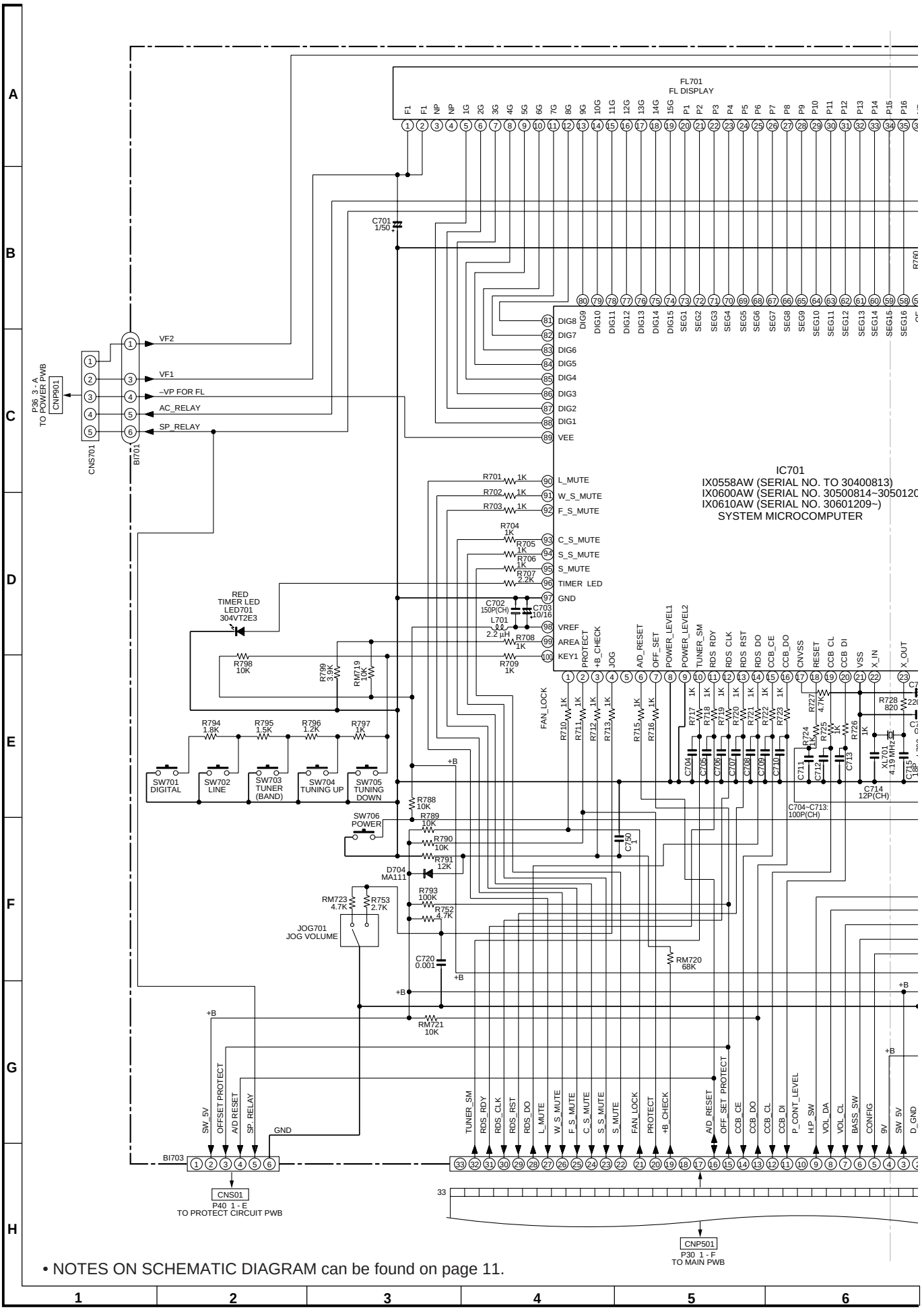
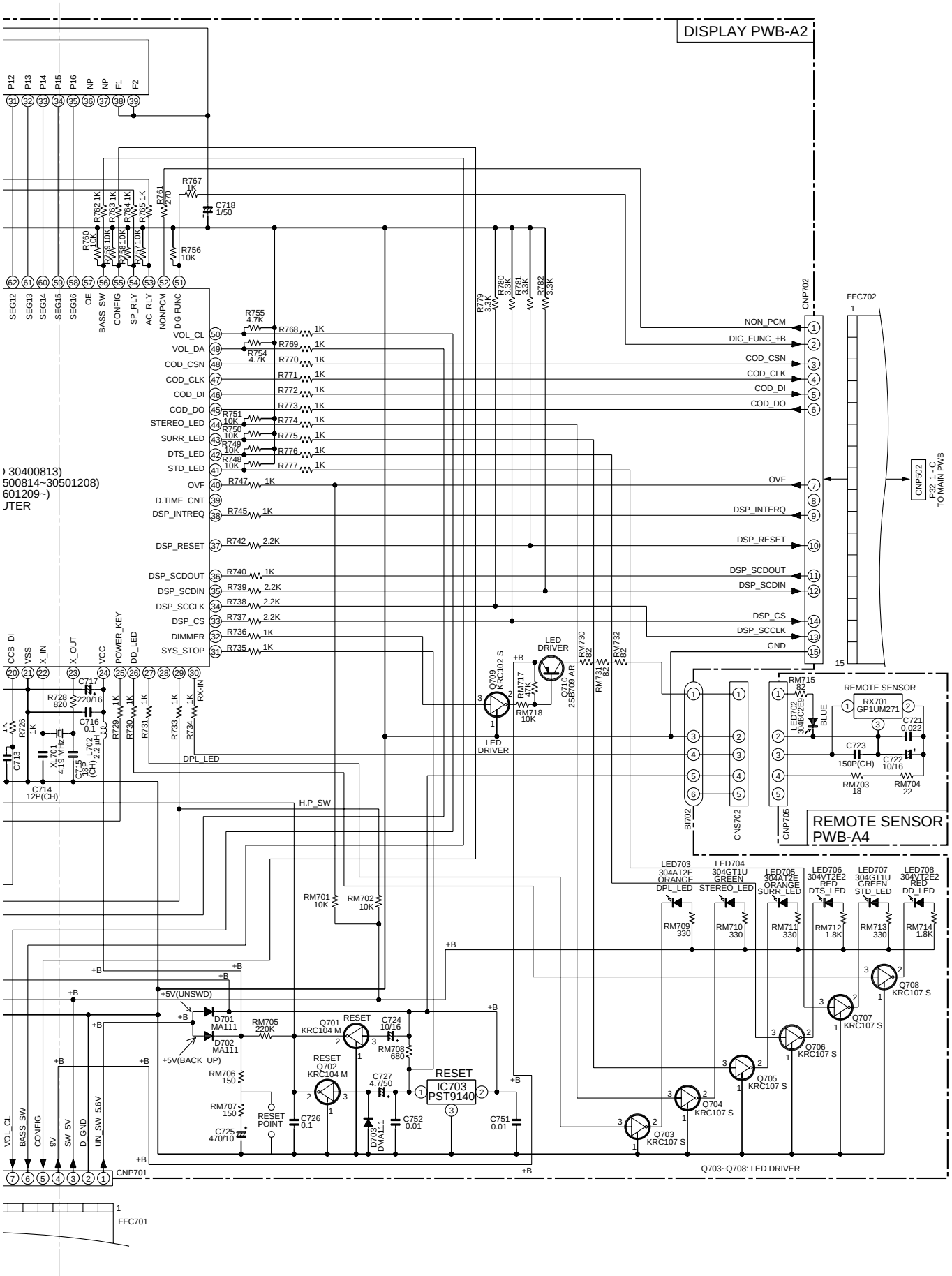
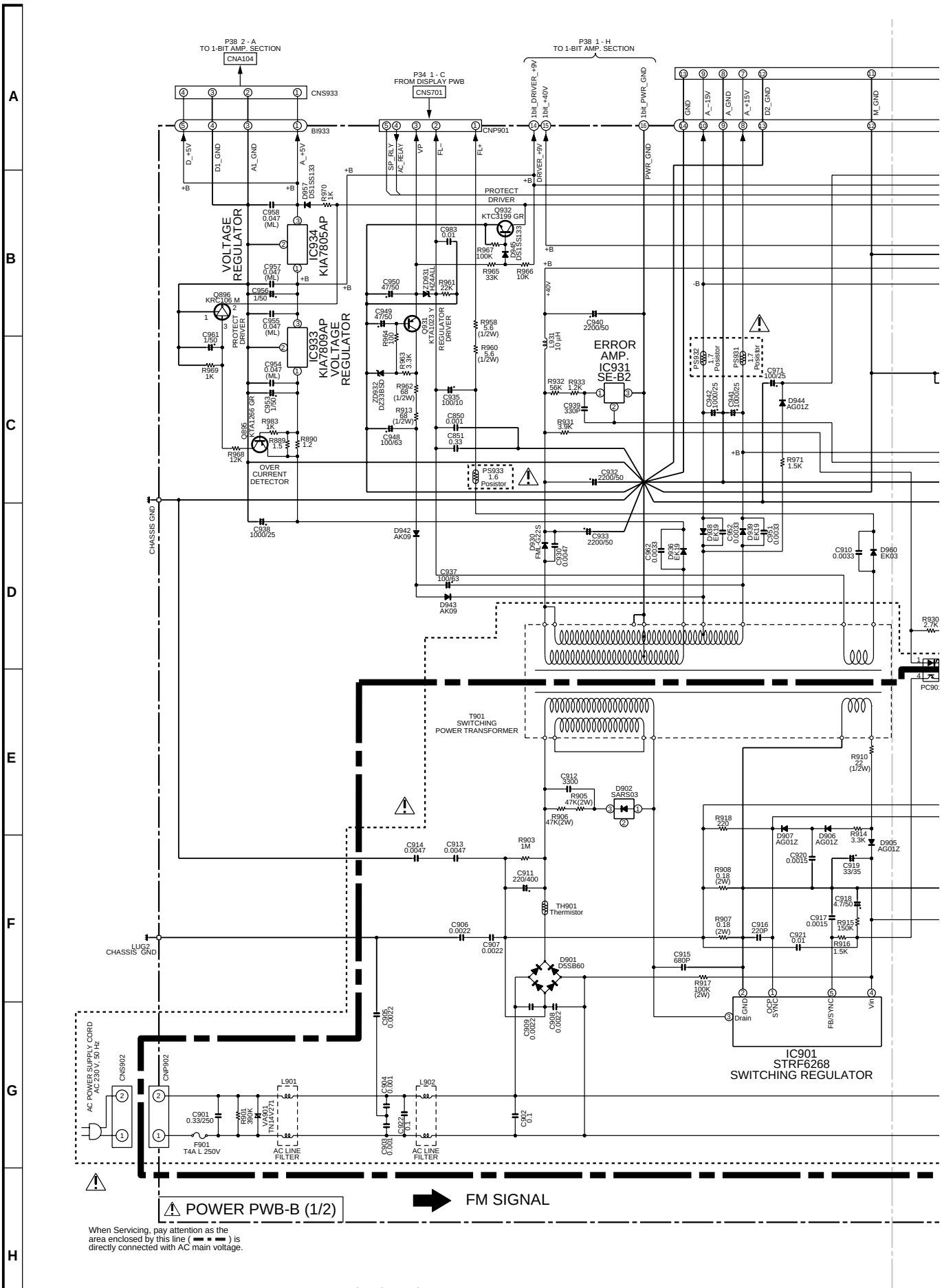


Figure 34 SCHEMATIC DIAGRAM (5/11)



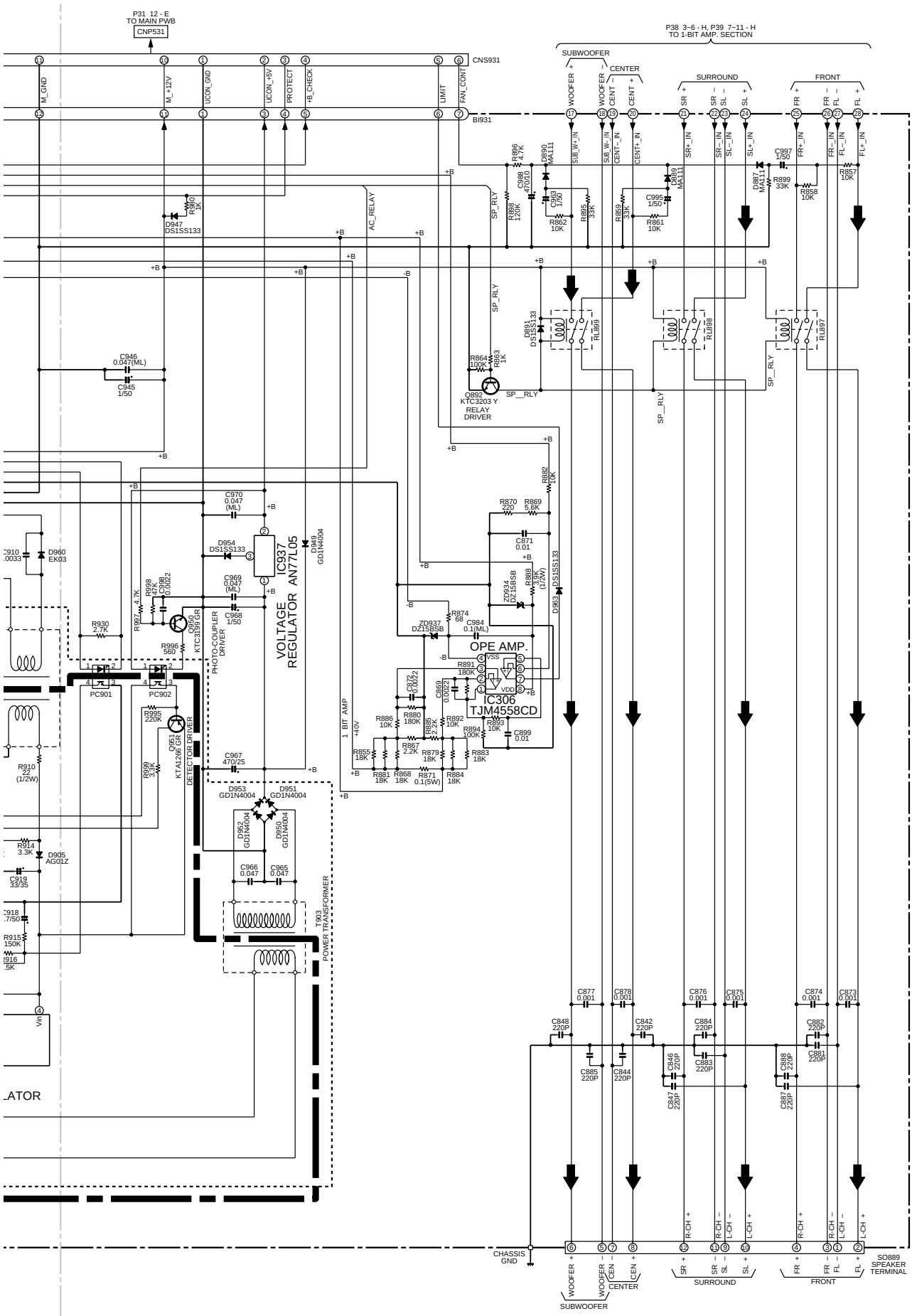
7	8	9	10	11	12

Figure 35 SCHEMATIC DIAGRAM (6/11)



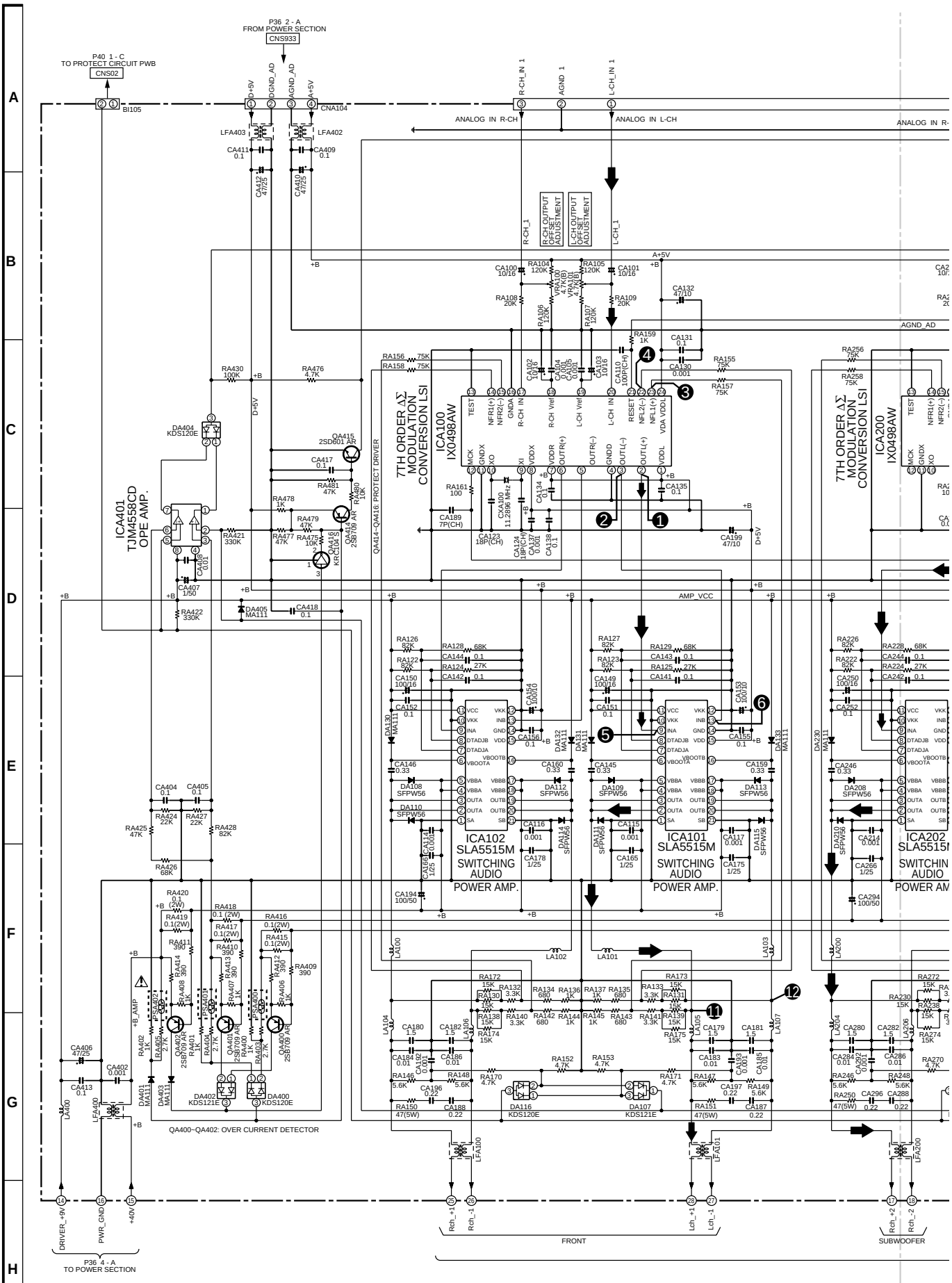
• NOTES ON SCHEMATIC DIAGRAM can be found on page 11.

Figure 36 SCHEMATIC DIAGRAM (7/11)



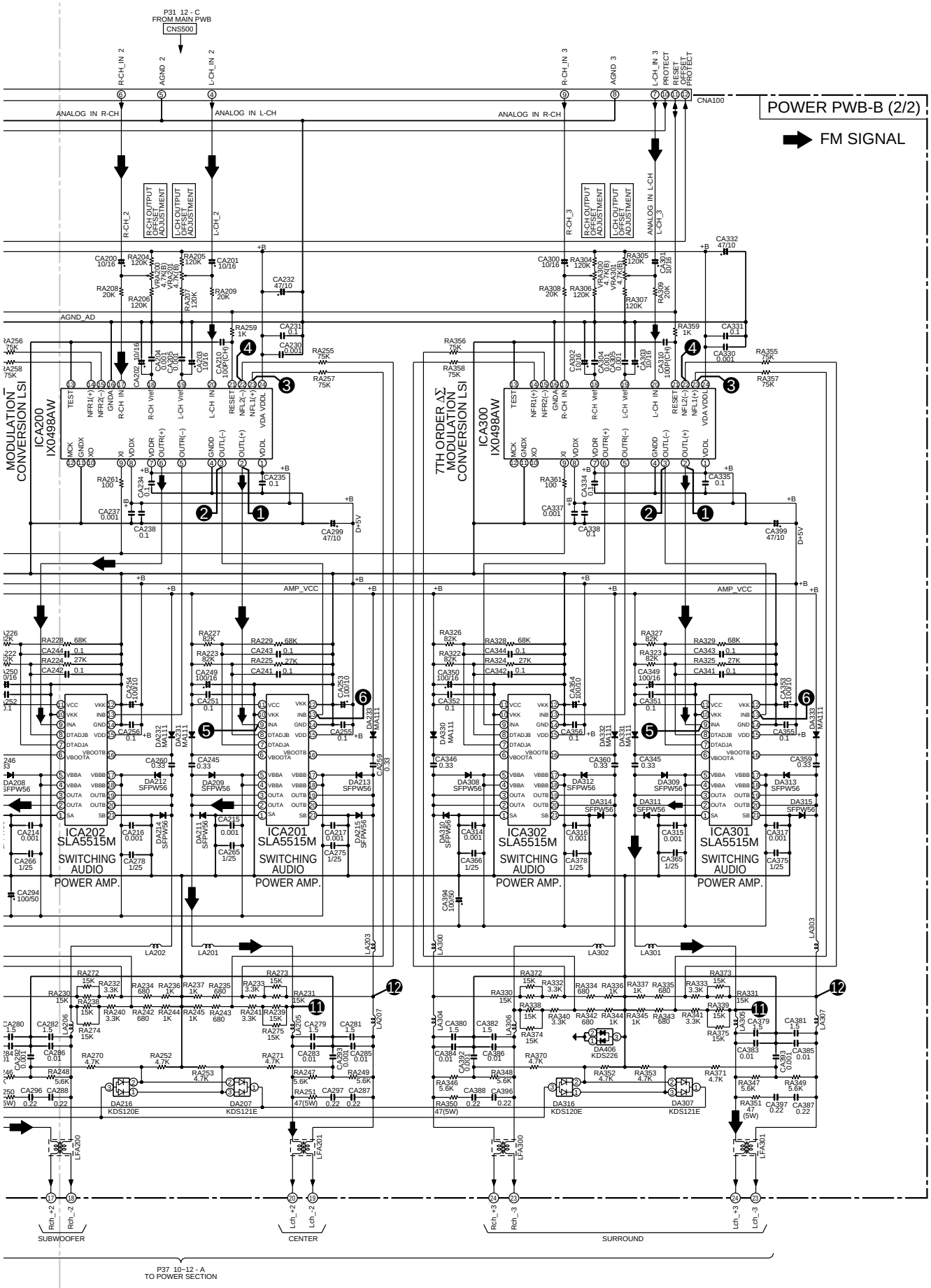
7	8	9	10	11	12

Figure 37 SCHEMATIC DIAGRAM (8/11)



• NOTES ON SCHEMATIC DIAGRAM can be found on page 11.

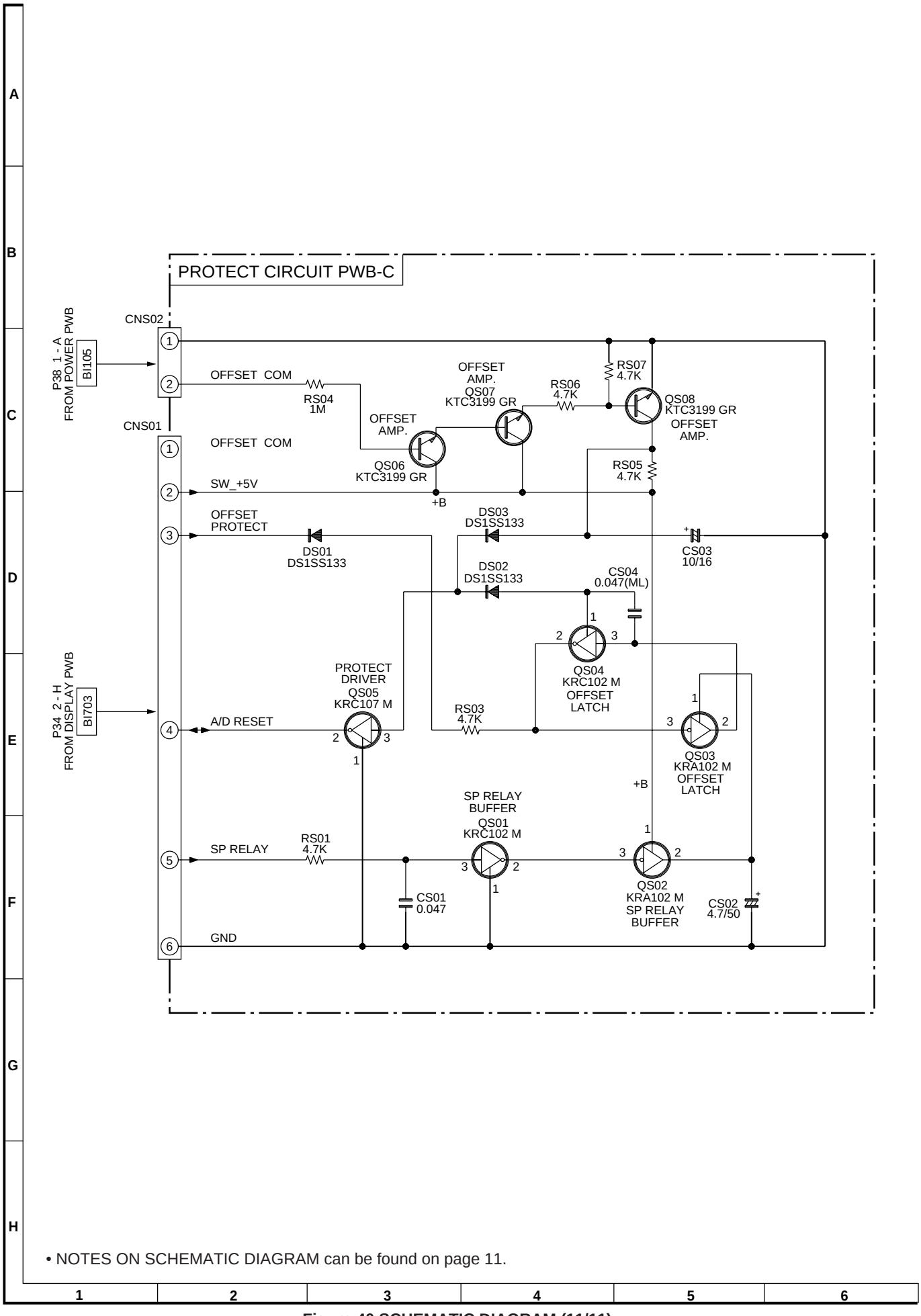
Figure 38 SCHEMATIC DIAGRAM (9/11)



• The numbers ❶ to ❻, ⓫, ⓬ are waveform numbers shown in page 42.

7	8	9	10	11	12

Figure 39 SCHEMATIC DIAGRAM (10/11)



• NOTES ON SCHEMATIC DIAGRAM can be found on page 11.

Figure 40 SCHEMATIC DIAGRAM (11/11)

VOLTAGE

IC701

PIN NO	VOLTAGE	PIN NO	VOLTAGE
1	2.81 V	51	0 V
2	3.49 V	52	0 V
3	2.33 V	53	4.58 V
4	4.93 V	54	4.55 V
5	1.02 V	55	0 V
6	4.57 V	56	4.59 V
7	4.86 V	57	-29.5 V
8	0 V	58	-29.3 V
9	0 V	59	-27.2 V
10	0 V	60	-22.5 V
11	0 V	61	-31.8 V
12	0 V	62	-31.7 V
13	0 V	63	-24.7 V
14	0 V	64	-20.0 V
15	0 V	65	-27.1 V
16	4.92 V	66	-19.8 V
17	0 V	67	-24.8 V
18	4.53 V	68	-24.6 V
19	0 V	69	-29.4 V
20	0 V	70	-22.2 V
21	0 V	71	-31.6 V
22	1.93 V	72	-22.5 V
23	2.18 V	73	-15.0 V
24	4.60 V	74	-29.3 V
25	4.98 V	75	-29.3 V
26	0 V	76	0 V
27	4.50 V	77	-29.3 V
28	4.58 V	78	-29.3 V
29	0 V	79	-29.3 V
30	4.91 V	80	-29.3 V
31	0 V	81	-29.5 V
32	4.60 V	82	-29.5 V
33	4.58 V	83	-29.5 V
34	4.58 V	84	-29.5 V
35	0 V	85	-29.5 V
36	3.25 V	86	-29.5 V
37	4.60 V	87	-29.5 V
38	3.25 V	88	-29.5 V
39	0 V	89	-32.0 V
40	0 V	90	0 V
41	4.59 V	91	4.48 V
42	0 V	92	4.48 V
43	0 V	93	4.50 V
44	0 V	94	4.48 V
45	0 V	95	4.46 V
46	0 V	96	0 V
47	4.55 V	97	0 V
48	4.50 V	98	4.80 V
49	0 V	99	4.80 V
50	0 V	100	4.80 V

IC501

PIN NO	VOLTAGE	PIN NO	VOLTAGE
1	0 V	41	0 V
2	0 V	42	0 V
3	0 V	43	0 V
4	0 V	44	0 V
5	0 V	45	0 V
6	0 V	46	0 V
7	0 V	47	0 V
8	0 V	48	2.58 V
9	0 V	49	0 V
10	0 V	50	-7.16 V
11	0 V	51	0 V
12	0 V	52	7.04 V
13	0 V	53	0 V
14	0 V	54	0 V
15	0 V	55	0 V
16	0 V	56	0 V
17	0 V	57	0 V
18	0 V	58	0 V
19	0 V	59	0 V
20	0 V	60	0 V
21	0 V	61	0 V
22	0 V	62	0 V
23	0 V	63	0 V
24	0 V	64	0 V
25	0 V	65	0 V
26	0 V	66	0 V
27	0 V	67	0 V
28	0 V	68	0 V
29	0 V	69	0 V
30	0 V	70	0 V
31	0 V	71	0 V
32	0 V	72	0 V
33	0 V	73	0 V
34	0 V	74	0 V
35	0 V	75	0 V
36	0 V	76	0 V
37	0 V	77	0 V
38	0 V	78	0 V
39	0 V	79	0 V
40	0 V	80	0 V

IC101

PIN NO	VOLTAGE
1	2.51 V
2	0 V
3	1.26 V
4	0 V
5	2.51 V
6	0 V
7	2.51 V
8	2.50 V
9	2.50 V
10	2.50 V
11	2.50 V
12	2.50 V
13	0 V
14	2.50 V
15	2.50 V
16	2.50 V
17	2.50 V
18	2.50 V
19	2.50 V
20	2.50 V
21	2.50 V
22	0 V
23	2.50 V
24	0 V
25	1.64 V
26	1.66 V
27	0 V
28	1.64 V
29	1.66 V
30	1.48 V
31	0 V
32	1.86 V
33	1.19 V
34	2.37 V
35	0 V
36	2.73 V
37	2.51 V
38	2.51 V
39	1.75 V
40	1.75 V
41	1.78 V
42	1.66 V
43	1.64 V
44	1.65 V

IC102

PIN NO	VOLTAGE
1	2.44 V
2	2.00 V
3	4.93 V
4	0 V
5	3.28 V
6	0 V
7	1.63 V
8	1.65 V
9	1.63 V
10	1.24 V
11	0 V
12	0 V
13	0 V
14	0 V
15	0 V
16	0.48 V
17	0 V
18	2.72 V
19	2.71 V
20	0 V
21	0 V
22	4.98 V
23	4.98 V
24	2.49 V
25	0 V
26	2.49 V
27	2.48 V
28	2.49 V
29	2.48 V
30	2.49 V
31	2.48 V
32	2.46 V
33	2.46 V
34	4.93 V
35	1.20 V
36	0 V
37	2.44 V
38	0 V
39	2.44 V
40	0 V
41	2.44 V
42	0 V
43	2.44 V
44	3.28 V

ICA100

PIN NO	VOLTAGE	PIN NO	VOLTAGE
1	5.00 V	13	0 V
2	2.48 V	14	2.56 V
3	2.48 V	15	2.56 V
4	0 V	16	0 V
5	2.48 V	17	2.48 V
6	2.48 V	18	2.48 V
7	4.95 V	19	2.48 V
8	4.98 V	20	2.48 V
9	1.93 V	21	4.62 V
10	2.26 V	22	2.56 V
11	0 V	23	2.56 V
12	2.55 V	24	4.95 V

ICA200

PIN NO	VOLTAGE	PIN NO	VOLTAGE
1	4.96 V	13	0 V
2	2.47 V	14	2.55 V
3	2.47 V	15	2.55 V
4	0 V	16	0 V
5	2.47 V	17	2.47 V
6	2.47 V	18	2.47 V
7	4.96 V	19	2.48 V
8	4.96 V	20	2.47 V
9	2.57 V	21	4.61 V
10	2.12 V	22	2.56 V
11	0 V	23	2.55 V
12	2.69 V	24	4.95 V

ICA300

PIN NO	VOLTAGE	PIN NO	VOLTAGE
1	4.96 V	13	0 V
2	2.47 V	14	2.56 V
3	2.47 V	15	2.56 V
4	0 V	16	0 V
5	2.47 V	17	2.47 V
6	2.47 V	18	2.48 V
7	4.96 V	19	2.48 V
8	4.95 V	20	2.48 V
9	2.57 V	21	4.61 V
10	2.11 V	22	2.56 V
11	0 V	23	2.56 V
12	2.69 V	24	4.95 V

ICA202

PIN NO	VOLTAGE
1	0 V
2	20.0 V
3	20.0 V
4	40.4 V
5	40.4 V
6	28.2 V
7	4.10 V
8	2.19 V
9	2.48 V
10	0 V
11	8.95 V
12	0 V
13	2.48 V
14	0 V
15	4.98 V
16	28.2 V
17	40.4 V
18	40.4 V
19	20.0 V
20	20.0 V
21	0 V

ICA301

PIN NO	VOLTAGE
1	0 V
2	20.0 V
3	20.0 V
4	40.4 V
5	40.4 V
6	28.2 V
7	4.10 V
8	2.22 V
9	2.48 V
10	0 V
11	8.90 V
12	0 V
13	2.47 V
14	0 V
15	4.98 V
16	28.2 V
17	40.0 V
18	40.4 V
19	20.1 V
20	20.0 V
21	0 V

IC109

PIN NO	VOLTAGE
1	2.65 V
2	2.65 V
3	0 V
4	0 V
5	4.95 V
6	2.65 V
7	2.65 V
8	4.95 V

IC110

PIN NO	VOLTAGE
1	9.01 V
2	0 V
3	5.01 V

ICA401

PIN NO	VOLTAGE
1	8.8 V
2	7.52 V
3	8.25 V
4	0 V
5	7.83 V
6	7.06 V
7	8.18 V
8	8.95 V

IC413

PIN NO	VOLTAGE
1	0 V
2	0 V
3	0 V
4	-8.44 V
5	0 V
6	0 V
7	0 V
8	8.45 V

IC104

PIN NO	VOLTAGE
1	2.49 V
2	3.26 V
3	0 V
4	0 V
5	2.71 V
6	2.49 V
7	0 V
8	2.49 V
9	2.71 V
10	0 V
11	0 V
12	3.26 V
13	2.49 V
14	3.27 V

ICA102

PIN NO	VOLTAGE
1	0 V
2	20.0 V
3	20.0 V
4	40.4 V
5	40.4 V
6	28.2 V
7	4.09 V
8	2.21 V
9	2.48 V
10	0 V
11	8.95 V
12	0 V
13	2.48 V
14	0 V
15	4.98 V
16	28.2 V
17	40.4 V
18	40.4 V
19	20.0 V
20	20.0 V
21	0 V

ICA201

PIN NO	VOLTAGE
1	0 V
2	20.0 V
3	20.0 V
4	40.4 V
5	40.4 V
6	28.2 V
7	4.09 V
8	2.20 V
9	2.48 V
10	0 V
11	8.95 V
12	0 V
13	2.47 V
14	0 V
15	4.98 V
16	28.2 V
17	40.4 V
18	40.4 V
19	20.0 V
20	20.0 V
21	0 V

ICA302

PIN NO	VOLTAGE
1	0 V
2	20.0 V
3	20.0 V
4	40.4 V
5	40.4 V
6	28.1 V
7	4.08 V
8	2.20 V
9	2.48 V
10	0 V
11	8.95 V
12	0 V
13	2.47 V
14	0 V
15	4.98 V
16	28.2 V
17	40.4 V
18	40.4 V
19	20.0 V
20	20.0 V
21	0 V

IC505

PIN NO	VOLTAGE
1	0 V
2	0 V
3	0 V
4	-11.57 V
5	0 V
6	0 V
7	0 V
8	10.43 V

IC520

PIN NO	VOLTAGE
1	0 V
2	0 V
3	0 V
4	-11.81 V
5	0 V
6	0 V
7	0 V
8	10.89 V

IC933

PIN NO	VOLTAGE
1	11.7 V
2	0 V
3	8.92 V

IC901

PIN NO	VOLTAGE
1	0.45 V
2	0 V
3	155 V
4	17.19 V
5	2.88 V

IC934

PIN NO	VOLTAGE
1	8.92 V
2	0 V
3	4.96 V

IC111

PIN NO	VOLTAGE
1	4.96 V
2	0 V
3	2.51 V

IC506

PIN NO	VOLTAGE
1	7.94 V
2	0 V
3	0 V
4	-8.43 V
5	0 V
6	0 V
7	0 V
8	8.48 V

IC411

PIN NO	VOLTAGE
1	0 V
2	0 V
3	0 V
4	-8.43 V
5	0 V
6	0 V
7	0 V
8	8.45 V

IC412

PIN NO	VOLTAGE
1	0 V
2	0 V
3	0 V
4	-8.44 V
5	0 V
6	0 V
7	0 V
8	8.45 V

IC112

PIN NO	VOLTAGE
1	4.97 V
2	0 V
3	3.28 V

IC306

PIN NO	VOLTAGE
1	0 V
2	10.21 V
3	10.20 V
4	-13.2 V
5	0 V
6	0 V
7	-12.8 V
8	14.4 V

ICA101

PIN NO	VOLTAGE
1	0 V
2	20.0 V
3	20.0 V
4	40.4 V
5	40.4 V
6	28.1 V
7	4.07 V
8	2.19 V
9	2.47 V
10	0 V
11	8.90 V
12	0 V
13	2.47 V
14	0 V
15	4.96 V
16	28.1 V
17	40.4 V
18	40.4 V
19	20.0 V
20	20.0 V
21	0 V

IC703

PIN NO	VOLTAGE
1	4.90 V
2	4.90 V
3	0 V

RX701

PIN NO	VOLTAGE
1	4.85 V
2	4.88 V
3	0 V

IC103

PIN NO	VOLTAGE
1	1.57 V
2	1.61 V
3	0 V
4	0 V
5	3.23 V
6	1.58 V
7	1.58 V
8	3.23 V

IC937

PIN NO	VOLTAGE
1	11.3 V
2	5.47 V
3	0.6 V

ICT21

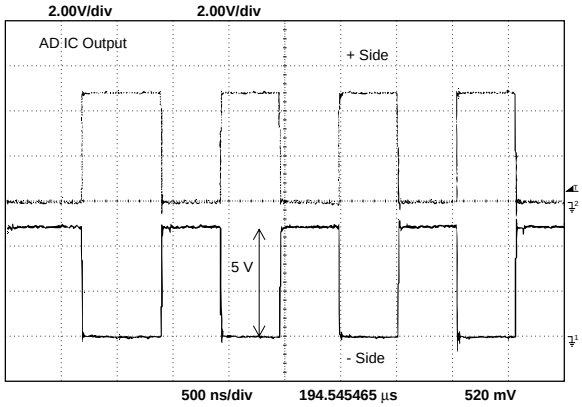
PIN NO	VOLTAGE	PIN NO	VOLTAGE
1	2.48 V	9	2.39 V
2	2.47 V	10	0 V
3	4.98 V	11	4.99 V
4	0 V	12	4.98 V
5	2.48 V	13	0 V
6	2.46 V	14	4.98 V
7	0 V	15	0 V
8	2.54 V	16	0 V

IC931

PIN NO	VOLTAGE
1	6.90 V
2	35.6 V
3	0 V

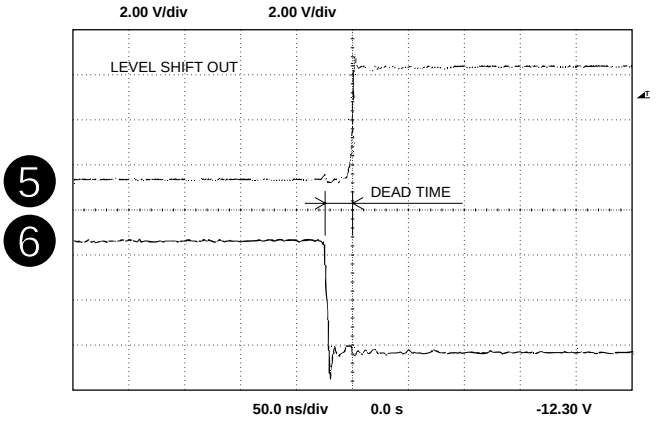
WAVEFORMS OF 1-BIT CIRCUIT

1
2



Amplitude
from 0 to 5 V

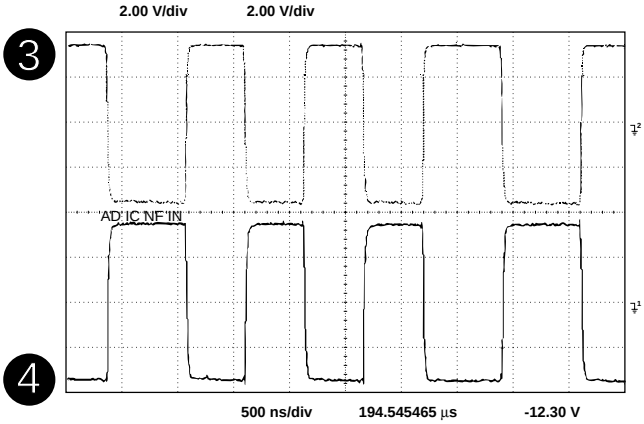
5
6



ZOOM UP

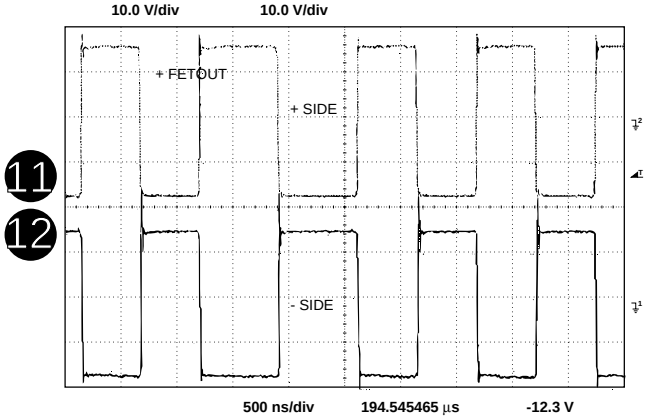
Dead time is generated by level shift input.
Leading edge is delayed at CR, passing R at DI.
Set value: 20 - 25 nsec.

3
4



In partial pressure OUT, 4 to 7 V amplitude of GND reference is observed.
In IC of 75 kohms, the reference is 2.5 V because of VREF. Due to imaginary GND of operational amplifier inside IC, the waveform cannot be monitored.
This waveform is partial pressure OUT.

11
12



Waveforms before low-pass filters at both ends of the speaker.
H-bridge may be considered as BTL.
However, here and at the gate drive, dead time is not observed; since bootstrap operates based on output, DEAD TIME part is in floating condition. The waveform on the HIGH side shows that only the booted voltage lowers.

FUNCTION TABLE OF IC

IC101 VHiCS493264-1: DSP (CS493264) (1/3)

Pin No.	Terminal Name	Input/Output	Function
1	VD1	Input	Digital positive supplies. Norminally + 2.5 V.
2	DGND1	—	Digital ground.
3	AUDATA3, XMT958	Output	CMOS level output that contains a biphase-mark encoded (S/PDIF) or I²S or Left Justified digital audio data which is capable of carrying two channels of PCM digital audio or an IEC61937 compressed-data interface. **Note:** Outputting of IEC61937 is only available for certain broadcast-based application codes which run on the CS4931X family or CS49330 device. This output typically connects to the input of an RS-422 transmitter or to the input of an optical transmitter.
4	$\overline{WR}$, $\overline{DS}$, $\overline{EMWR}$, GPIO10	Input	In Intel parallel host mode, this pin serves as the active-low data-write-input strobe. In Motorola parallel host mode, this pin serves as the active-low data-strobe-input signal. In serial host mode, this pin can serve as the external-memory active-low write-enable output signal. Also in serial host mode, this pin can serve as a general purpose input or output bit.
5	$\overline{RD}$, R/$\overline{W}$, $\overline{EMOE}$, GPIO11	Input	In Intel parallel host mode, this pin serves as the active-low data bus enable input. In Motorola parallel host mode, this pin serves as the read-high/write-low control input signal. In serial host mode, this pin can serve as the external memory active-low data-enable output signal. Also in serial host mode, this pin can serve as a general purpose input or output bit.
6	A1, SCDIN	Input	In parallel host mode, this pin serves as one of two address input pins used to select one of four parallel registers. In SPI serial host mode, this pin serves as the data input.
7	A0, SCCLK	Input	In parallel host mode, this pin serves as one of two address input pins used to select one four parallel registers. In serial host mode, this pin serves as the serial control clock signal, specifically as the SPI clock input or the I²C clock input.
8-11	DATA7, EMAD7, GPIO7-DATA4, EMAD4, GPIO4	Input	In parallel host mode, these pins provide a bidirectional data bus. If a serial host mode is selected, these pins can provide a multiplexed address and data bus for connecting an 8-bit external memory. Otherwise, in serial host mode, these pins can act as general-purpose input or output pins that can be individually configured and controlled by the DSP.
12	VD2	Input	Digital positive supplies. Norminally + 2.5 V.
13	DGND2	—	Digital ground.
14-17	DATA3, EMAD3, GPIO3-DATA0, EMAD0, GPIO0	Input	In parallel host mode, these pins provide a bidirectional data bus. If a serial host mode is selected, these pins can provide a multiplexed address and data bus for connecting an 8-bit external memory. Otherwise, in serial host mode, these pins can act as general-purpose input or output pins that can be individually configured and controlled by the DSP.
18	$\overline{CS}$	Input	In parallel host mode, this pin serves as the active-low chip-select input signal. In serial host SPI mode, this pin is used as the active-low chip-select input signal.
19	SCDIO, SCDOUT, PSEL, GPIO9	Input	In I²C mode, this pin serves as the open-drain bidirectional data pin. In SPI mode this pin serves as the data output pin. In parallel host mode, this pin is sampled at the rising edge of $\overline{RESET}$ to configure the parallel host mode as an Intel type bus or as a Motorola type bus. In parallel host mode, after the bus mode has been selected, the pin can function as a general-purpose input or output pin. In I²C mode this pin is an OPEN DRAIN I/O and requires a 4.7 k Pull-Up.
20	$\overline{INTREQ}$, $\overline{ABOOT}$	—	Open-drain interrupt-request output. This pin is driven low to indicate that the DSP has outgoing control data and should be serviced by the host. Also in serial host mode, this signal initiates an automatic boot cycle from external memory if it is held low through the rising edge of reset. OPEN DRAIN I/O - Requires 4.7 kohms Pull-Up.
21	$\overline{EXTMEM}$, GPIO8	Input	In serial control port mode, this pin can serve as an output to provide the chip-select for an external byte-wide ROM. In parallel and serial host mode, this pin can also function as a general-purpose input or output pin.
22	SDATAN1	Input	Digital-audio data input that can accept from one to six channels of compressed or PCM data. SDATAN1 can be sampled with either edge of SCLKN1, depending on how SCLKN1 has been configured.
23	VD3	Input	Digital positive supplies. Norminally + 2.5 V.
24	DGND3	—	Digital ground.

IC101 VHiCS493264-1: DSP (CS493264) (2/3)

Pin No.	Terminal Name	Input/Output	Function
25	SCLKN1, STCCLK2	Input	Bidirectional digital-audio bit clock that is an output in master mode and an input in slave mode. In slave mode, SCLKN1 operates asynchronously from all other CS493XX clocks. In master mode, SCLKN1 is derived from the CS493XX internal clock generator. In either master or slave mode, the active edge of SCLKN1 can be programmed by the DSP. For applications supporting PES layer synchronization this pin can be used as STCCLK2, which provides a path to the internal STC 33 bit counter.
26	LRCLKN1	Input	Bidirectional digital-audio frame clock that is an output in master mode and an input in slave mode. LRCLKN1 typically is run at the sampling frequency. In slave mode, LRCLKN1 operates asynchronously from all other CS493XX clocks. In master mode, LRCLKN1 is derived from the CS493XX internal clock generator. In either master or slave mode, the polarity of LRCLKN1 for a particular subframe can be programmed by the DSP.
27	CMPDAT, SDATAN2	Input	Digital-audio data input that can accept from one to six channels of compressed or PCM data. SDATAN2 can be sampled with either edge of SCLKN2, depending on how SCLKN2 has been configured. Similarly CMPDAT is the compressed data input pin when the CDI is configured for bursty delivery. When in this mode, the CS493XX internal PLL is driven by the clock recovered from the incoming data stream.
28	CMPCLK, SCLKN2	Input	Bidirectional digital-audio bit clock that is an output in master mode and an input in slave mode. In slave mode, SCLKN2 operates asynchronously from all other CS493XX clocks. In master mode, SCLKN2 is derived from the CS493XX internal clock generator. In either master or slave mode, the active edge of SCLKN2 can be programmed by the DSP. If the CDI is configured for bursty delivery, CMPCLK is an input used to sample CMPDAT.
29	CMPREQ, LRCLKN2	Input	When the CDI is configured as a digital audio input, this pin serves as a bidirectional digital-audio frame clock that is an output in master mode and an input in slave mode. LRCLKN2 typically is run at the sampling frequency. In slave mode, LRCLKN2 operates asynchronously from all other CS493XX clocks. In master mode, LRCLKN2 is derived from the CS493XX internal clock generator. In either master or slave mode, the polarity of LRCLKN2 for a particular subframe can be programmed by the DSP. When the CDI is configured for bursty delivery, or parallel audio data delivery is being used, CMPREQ is an output which serves as an internal FIFO monitor. CMPREQ is an active low signal that indicates when another block of data can be accepted.
30	CLKIN	Input	CS493XX clock input. When in internal clock mode (CLKSEL == DGND), this input is connected to the internal PLL from which all internal clocks are derived. When in external clock mode (CLKSEL == VD), this input is connected to the DSP clock.
31	CLKSEL	Input	This pin selects the clock mode of the CS493XX. When CLKSEL is low, CLKIN is connected to the internal PLL from which all internal clocks are derived. When CLKSEL is high CLKIN is connected to DSP clock.
32, 33	FILT2, FILT1	—	Connects to an external filter for the on-chip phase-locked loop.
34	VA	Input	Analog positive supply for clock generator. Nominally +2.5 V.
35	AGND	—	Analog ground for clock generator PLL.
36	$\overline{\text{RESET}}$	Input	Asynchronous active-low master reset input. Reset should be low at power-up to initialize the CS493XX and to guarantee that the device is not active during initial power-on stabilization periods. As the rising edge of reset the host interface mode is selected contingent on the state of the $\overline{\text{RD}}$, $\overline{\text{WR}}$ and PSEL pins. Additionally, an autoboot sequence can be initiated if a serial control mode is selected and $\overline{\text{ABOOT}}$ is held low. If reset is low all bidirectional pins are high impedance inputs.
37, 38	DD, DC	—	This pin is reserved and should be pulled up with an external 4.7 k resistor.
39, 40	AUDATA2, AUDATA1	Output	PCM multi-format digital-audio data output, capable of two-channel 20-bit output. This PCM output defaults to DGND as output until enabled by the DSP software.
41	AUDATA0	Output	PCM multi-format digital-audio data output, capable of two-, four-, or six-channel 20-bit output. This PCM output defaults to DGND as output until enabled by the DSP software.
42	LRCLK	Input	Bidirectional digital-audio output-sample-rate clock. LRCLK can be an output that is divided from MCLK to provide the output sample rate depending on the output configuration. LRCK can also be an input. As an input LRCLK is independent of MCLK.

IC101 VHiCS493264-1: DSP (CS493264) (3/3)

Pin No.	Terminal Name	Input/Output	Function
43	SCLK	Input	Bidirectional digital-audio output bit clock. SCLK can be an output that is derived from MCLK to provide 32 Fs, 64 Fs, 128 Fs, 256 Fs, or 512 Fs, depending on the MCLK rate and the digital-output configuration. SCLK can also be an input and must be at least 48 Fs or greater. As an input, SCLK is independent of MCLK.
44	MCLK	Input	Bidirectional master audio clock. MCLK can be an output from the CS493XX that provides an oversampled audio-output clock at either 128 Fs, 256 Fs, or 512 Fs. MCLK can be an input at 128 Fs, 256 Fs, 384 Fs, or 512 Fs. MCLK is used to derive SCLK and LRCLK when SCLK and LRCLK are driven by the CS493XX.

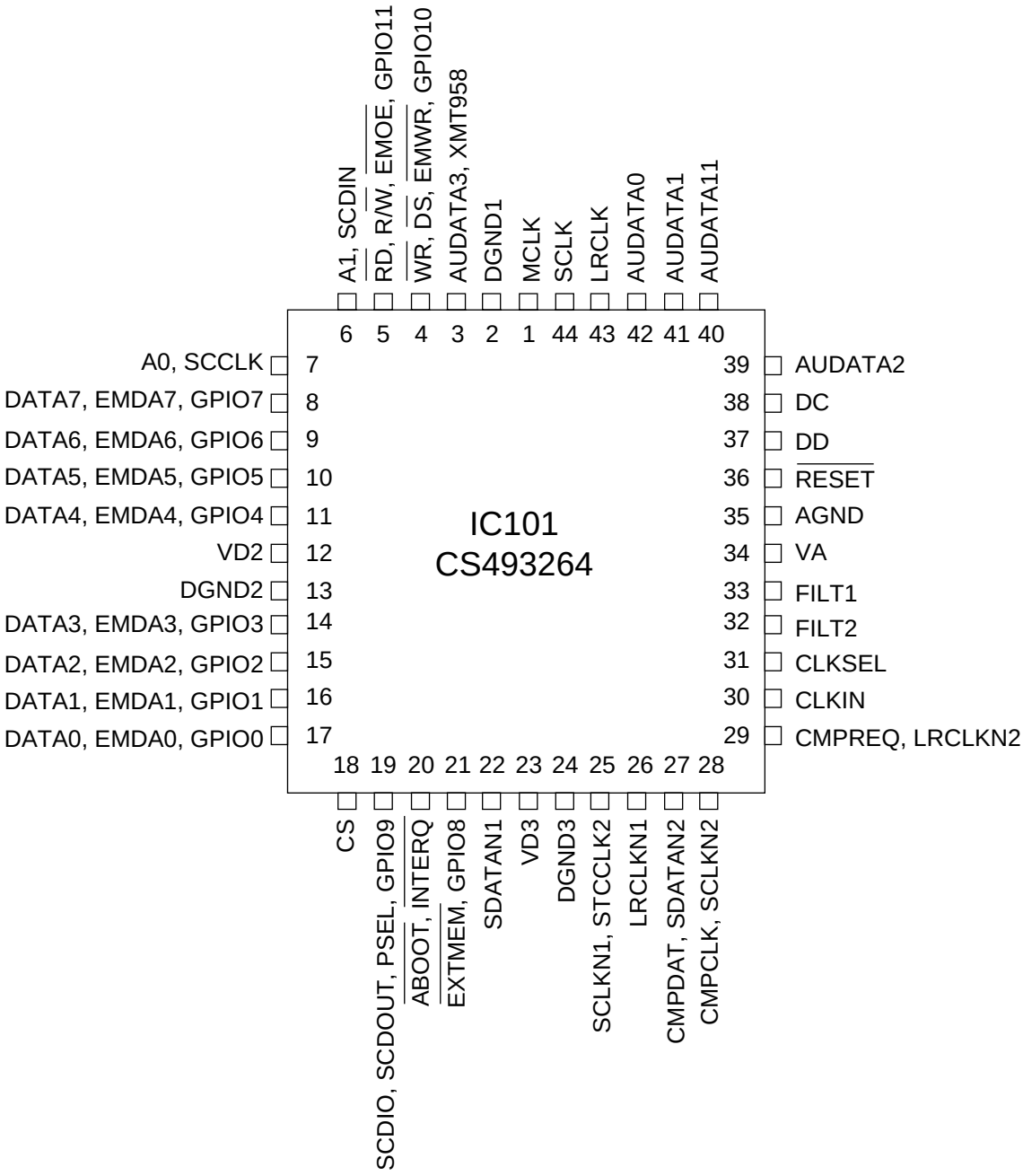


Figure 45 BLOCK DIAGRAM OF IC

IC102 VHiAK4586VQ-1: ADC/DAC/DIR Converter (AK4586VQ) (1/2)

Pin No.	Terminal Name	Input/Output	Function
1*	XTO	Output	Crystal resonator output pin.
2	XTI	Input	Crystal resonator input pin.
	EXTCLK	Input	Master clock input pin.
3	TVDD	Input	Power supply pin for the output buffer. 2.7 V – 5.5 V.
4	DVSS	—	Digital ground pin. 0 V.
5	DVDD	Input	Digital power supply pin. 4.5 V – 5.5 V.
6*	TX	Output	Transmit channel (through data) output pin.
7	MCKO	Output	Master clock output pin.
8	LRCK	Input/Output	Input/output channel clock pin.
9	BICK	Input/Output	Audio serial data clock pin.
10	SDTO	Output	Audio serial data output pin.
11	SDTI1	Input	DAC1 audio serial data input pin.
12	SDTI2	Input	DAC2 audio serial data input pin.
13	SDTI3	Input	DAC3 audio serial data input pin.
14*	INT0	Output	Interrupt 0 pin.
15	INT1	Output	Interrupt 1 pin.
16	CDTO	Output	Control data output pin. (In the 4-line serial mode)
	CAD1	Input	Chip address 1 pin. (In the I^2C bus mode)
17	CDTI	Input	Control data input pin. (In the 4-line serial mode)
	SDA	Input/Output	Control data input/output pin. (In the I^2C bus mode)
18	CCLK	Input	Control data clock pin. (In the 4-line serial mode)
	SCL	Input	Control data clock pin. (In the I^2C bus mode)
19	CSN	Input	Chip select pin. (In the 4-line serial mode)
	CAD0	Input	Chip address 0 pin. (In the I^2C bus mode)
20	DZF2	Output	Zero input detect 2 pin. (Note 1) When the input data of group 2 is “0” for 8192 times in a row or the RSTN bit is “0”, it changes to “H”.
	OVF	Output	Analog input overflow detect pin. (Note 2) It changes to “H” if the analog input of Lch or Rch overflows.
21	AVSS	—	Analog ground pin. 0 V.
22	AVDD	Input	Analog power supply pin. 4.5 V – 5.5 V.
23	VREFH	Input	Reference voltage input pin. AVDD.
24	VCOM	Output	Common voltage output pin. AVDD/2.
25*	DZF1	Output	Zero input detect 1 pin. (Note 1) When the input data of group 1 is “0” for 8192 times in a row or the RSTN bit is “0”, it changes to “H”.
26	LOUT3	Output	DAC3 L channel analog output pin.
27	ROUT3	Output	DAC3 R channel analog output pin.
28	LOUT2	Output	DAC2 L channel analog output pin.
29	ROUT2	Output	DAC2 R channel analog output pin.
30	LOUT1	Output	DAC1 L channel analog output pin.
31	ROUT1	Output	DAC1 R channel analog output pin.
32	LIN	Input	L channel analog input pin.
33	RIN	Input	R channel analog input pin.
34	PVDD	Input	PLL power supply pin. 4.5 V – 5.5 V.
35	R	—	External resistor pin.
36	PVSS	—	PLL ground pin. 0 V.
37*	RX4	Input	Receiver channel input 4 pin. (Internal bias pin)
38	SLAVE	Input	Slave mode pin. “L” : master mode or slave mode, “H” : slave mode
39*	RX3	Input	Receiver channel input 3 pin. (Internal bias pin)
40	TST	Input	Test pin. Connect to DVSS.

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC102 VHiAK4586VQ-1: ADC/DAC/DIR Converter (AK4586VQ) (2/2)

Pin No.	Terminal Name	Input/Output	Function
41	RX2	Input	Receiver channel input 2 pin. (Internal bias pin)
42	I²C	Input	Serial control mode selection pin. “L” : 4-line serial, “H” : I2C bus
43	RX1	Input	Receiver channel input 1 pin. (Internal bias pin)
44	PDN	Input	Power down & reset pin. When this pin is set to “L”, it falls into power down state; all the output pins change to “L” and the register is initialized. If CAD1-0 is switched, reset it using the PDN pin.

Notes :
1. Grouping of the channels can be set with DZFM2-0 bit.
2. This pin turns to an OVF pin if the OVFE bit is set to “1”.
3. Except for the internal bias pins, any of the digital input pins must not be floated.

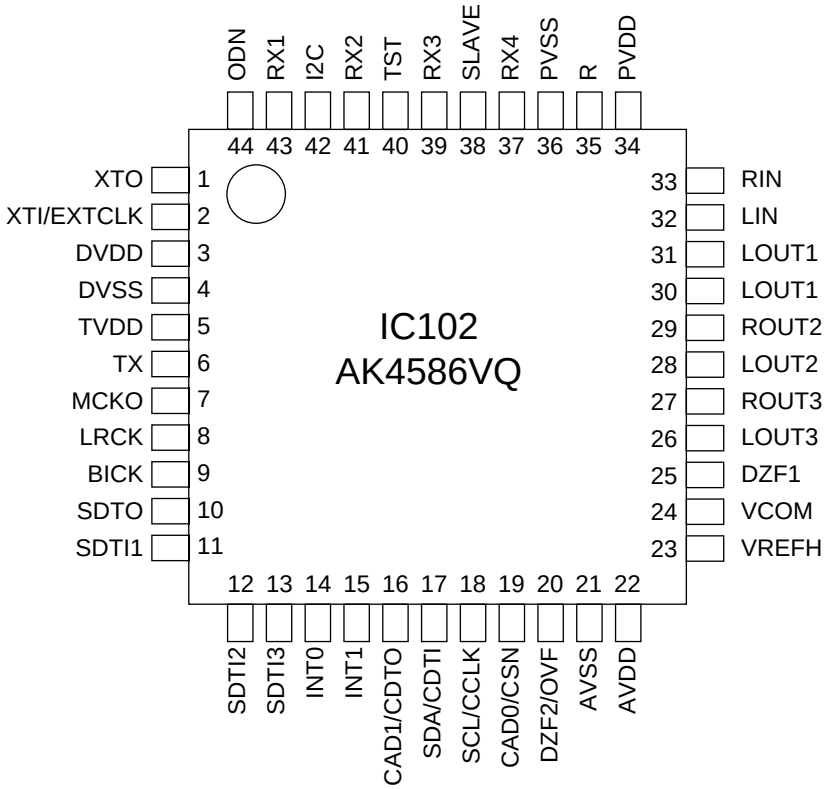


Figure 47 BLOCK DIAGRAM OF IC

IC501 VHiBD3811K1-1: Volume IC (BD3811K1) (1/2)

Pin No.	Terminal Name	Function
1	IN31	1ch input terminal 3.
2	IN32	2ch input terminal 3.
3	IN41	1ch input terminal 4.
4	IN42	2ch input terminal 4.
5*	IN51	1ch input terminal 5.
6*	IN52	2ch input terminal 5.
7	IN61	1ch input terminal 6.
8	IN62	2ch input terminal 6.
9	IN71	1ch input terminal 7.
10	IN72	2ch input terminal 7.
11	IN81	1ch input terminal 8.
12	IN82	2ch input terminal 8.
13	INDVDSR	DVD surround Rch input terminal.
14	INDVDSL	DVD surround Lch input terminal.
15	INDVDC	DVD center speaker input terminal.
16	INDVDSW	DVD subwoofer input terminal.
17	OUT2(+)	2ch (+) A/D output terminal.
18*	OUT2(-)	2ch (-) A/D output terminal.
19	OUT1(+)	1ch (+) A/D output terminal.
20*	OUT1(-)	1ch (-) A/D output terminal.
21	IN1DSP	1ch DSP input terminal.
22	IN1MIX	1ch DSP MIX input terminal.
23	IN2DSP	2ch DSP input terminal.
24	IN2MIX	2ch DSP MIX input terminal.
25	INDSPSR	DSP surround Rch input terminal.
26	INDSPSL	DSP surround Lch input terminal.
27	INDSPC	DSP center speaker input terminal.
28	INDSPSW	DSP subwoofer input terminal.
29	AGND1	Analog ground terminal.
30	GOUTSW	Subwoofer input gain output terminal.
31	VINSW	Subwoofer volume input terminal.
32	AGND2	Analog ground terminal.
33	GOUTC	Center speaker input gain output terminal.
34	VINC	Center speaker volume input terminal.
35	OUTSW	Subwoofer output terminal.
36	OUTC	Center speaker output terminal.
37	OUTSL	Surround Lch output terminal.
38	OUTSR	Surround Rch output terminal.
39	VINSL	Surround Lch volume input terminal.
40	GOUTSL	Surround Lch input gain output terminal.
41	AGND3	Analog ground terminal.
42	VINSR	Surround Rch volume input terminal.
43	GOUTSR	Surround Rch input gain output terminal.
44	AGND4	Analog ground terminal.
45	DGND	Ground terminal for comparator.
46	DA	Serial data and latch input terminal.
47	CL	Serial clock input terminal.
48	MUTE	Mute terminal.
49	AGND5	Analog ground terminal.
50	VEE	(-) Power supply terminal.
51	AGND6	Analog ground terminal.

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC501 VHiBD3811K1-1: Volume IC (BD3811K1) (2/2)

Pin No.	Terminal Name	Function
52	VCC	(+) Power supply terminal.
53, 54	AGND7, AGND8	Analog ground terminal.
55	OUT1	1ch output terminal.
56*	BBNF1	1ch bass boost filter terminal.
57	OUT2	2ch output terminal.
58*	BBNF2	2ch bass boost filter terminal.
59	BNF22	2ch bass filter terminal 2.
60	BNF12	2ch bass filter terminal 1.
61	BNF21	1ch bass filter terminal 2.
62	BNF11	1ch bass filter terminal 1.
63	TNF1	1ch treble filter terminal.
64	TNF2	2ch treble filter terminal.
65	VIN1	1ch (Lch) volume input terminal.
66	GOUT1	1ch (Lch) input gain output terminal.
67	AGND9	Analog ground terminal.
68	VIN2	2ch (Rch) volume input terminal.
69	GOUT2	2ch (Rch) input gain output terminal.
70	AGND10	Analog ground terminal.
71*	ROUT11	1ch REC input and output terminal 1.
72*	ROUT12	2ch REC input and output terminal 1.
73*	ROUT21	1ch REC output terminal 2.
74*	ROUT22	2ch REC output terminal 2.
75	ROUT31	1ch REC output terminal 3.
76	ROUT32	2ch REC output terminal 3.
77	IN11	1ch input terminal 1.
78	IN12	2ch input terminal 1.
79	IN21	1ch input terminal 2.
80	IN22	2ch input terminal 2.

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC501 VHiBD3811K1-1: Volume IC (BD3811K1)

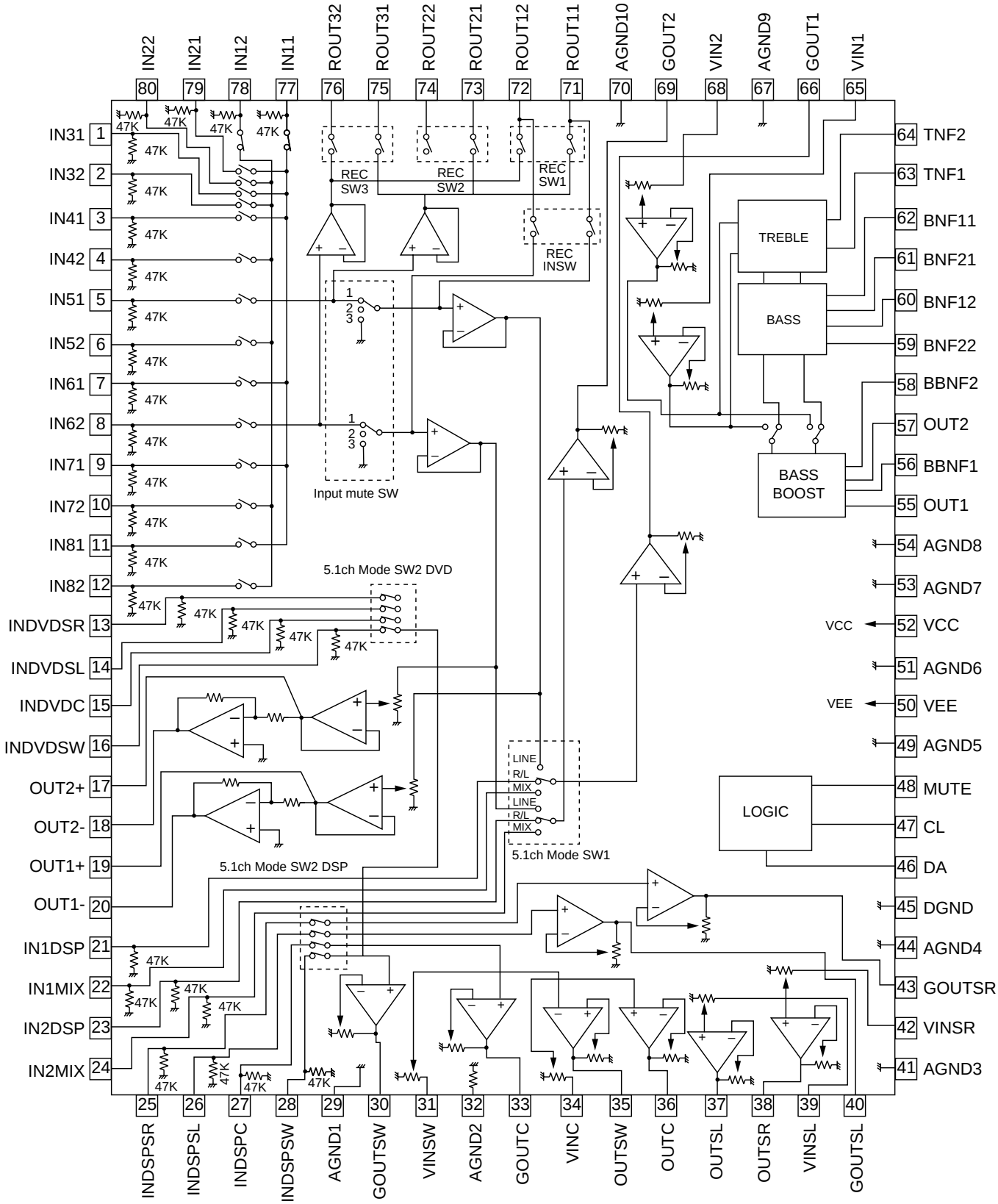


Figure 50 BLOCK DIAGRAM OF IC

IC701 RH-iX0558AWZZ: System Microcomputer (IX0558AW) (1/2) (Serial No. To 30400813)
IC701 RH-iX0600AWZZ: System Microcomputer (IX0600AW) (1/2) (Serial No. 30500814~30501208)
IC701 RH-iX0610AWZZ: System Microcomputer (IX0610AW) (1/2) (Serial No. 30601209~)

Pin No.	Port Name	Terminal Name	Input/Output	Function
1	PA5/AN5	FAN_LOCK	A/D Input	Fan stop detection.
2	PA4/AN4	PROTECT	A/D Input	Power abnormal detection.
3	PA3/AN3	+B_CHECK	A/D Input	Observe power on input and decide the reset timing.
4	PA2/AN2	JOG	Input	Key input jog.
5*	PA1/AN1	FAN_CHK	A/D Input	Fan motor rotation detect input.
6	PA0/AN0	A/D RESET	Input/Output	1-bit amp. A/D RESET control.
7	P97/BUA02/AN15	OFF_SET	Input	1-bit amp. OFFSET error detection. "L": ABNORMAL
8	P96/PWM0/AN14	POWER_LEVEL1 (-B CONT)	Output	1-bit amp. and power switch detection.
9	P95/RTP0/AN13	POWER_LEVEL2 (REG ON)	Output	Speaker protect.
10	P94/RTP1/AN12	TUNER_SM	Input	Tuner IF signal monitor.
11	P93/SRDY3/AN11	RDS_RDY	Input	RDS ready output.
12	P92/SCLK3/AN10	RDS_CLK	Output	RDS clock output.
13	P91/SOUT3/AN9	RDS_RST	Output	RDS RAM reset.
14	P90/SIN3/AN8	RDS_DO	Input	RDS data input.
15	P83/CNTR0/CNTR2	CCB_CE	Output	TUNER PLL/VOL IC interface chip enable output.
16	P82/CNTR1	CCB_DO	Input	TUNER PLL/VOL IC interface data output.
17	CNVSS	CNVSS VPP (FLASH)	Input	GND
18	RESET	RESET	Input	System microcomputer reset input. "L": RESET
19	P81/XCOUT	CCB_CL	Output	TUNER PLL/VOL IC interface clock output.
20	P80/XCIN	CCB_DI	Output	TUNER PLL/VOL IC interface data output.
21	VSS	VSS VSS (FLASH)	Input	GND
22	XIN	XIN	Input	Main clock input 4.19 MHz.
23	XOUT	XOUT	Output	Main clock input 4.19 MHz.
24	VCC	VCC VCC (FLASH)	Input	Power supply 5 V.
25	P77/INT4/BUZ01	POWER KEY	Input	Power ON key input.
26	P76/T3OUT	DD_LED	Input	Dolby digital indicator. "H" (OPEN): OFF "L": ON
27	P75/T1OUT	DPL_LED	Input	Dolby prologic indicator. "H" (OPEN): OFF "L": ON
28*	P74/PWM1	40 V RELAY	Output	40 V control port. "H": ACTIVE "L": OFF
29	P73/INT3/DIMOUT	H.P_SW	Input	Headphones detection switch input.
30	P72/INT2	RX_IN	INT Input	Remocon decoder input.
31	P71/INT1	SYS_STOP	INT Input	AC power signal monitor. "H"→"L" power failure detect.
32	P70/INT0	DIMMER	Output	Dimmer L: Dimmer ON, Power OFF, Power failure H: Dimmer OFF
33	P67/SRDY2/SCLK22/FLD55	DSP_CS	Input	DSP IC communication strobe serial output.
34	P66/SCLK2/FLD54	DSP_SCCLK	Output	DSP IC communication serial clock output.
35	P65/TXD/FLD53	DSP_SCDIN	Output	DSP IC serial data output.
36	P64/RXD/FLD52	DSP_SCDOUT	Input	DSP IC serial data input.
37	P63/FLD51	DSP_RESET	Output	DSP IC communication interface clock.
38	P62/FLD50	DSP_INTREQ	Input	Request signal input to receive DSP data. "L": DSP Microcomputer demand data
39*	P61/FLD49	D. TIME CONT	Output	Deadtime control port. Only in tuner mode: "H"
40	P60/FLD48		Input	Not used.
41	P57/FLD47	STD_LED	Output	Standard sound mode indicator. "H" (OPEN): OFF "L": ON
42	P56/FLD46	DTS_LED	Output	DTS indicator. "H" (OPEN): OFF "L": ON

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC701 RH-iX0558AWZZ: System Microcomputer (IX0558AW) (2/2) (Serial No. To 30400813)
IC701 RH-iX0600AWZZ: System Microcomputer (IX0600AW) (2/2) (Serial No. 30500814~30501208)
IC701 RH-iX0610AWZZ: System Microcomputer (IX0610AW) (2/2) (Serial No. 30601209~)

Pin No.	Port Name	Terminal Name	Input/Output	Function
43	P55/FLD45	SURR_LED	Output	Surround sound mode indicator. "H" (OPEN): OFF "L": ON
44	P54/FLD44	STEREO_LED	Output	Stereo indicator. "H" (OPEN): OFF "L": ON
45	P53/FLD43	COD_DO	Input/Output	Codec data output.
46	P52/FLD42	COD_DI	Output	Codec data input.
47	P51/FLD41	COD_CLK	Output	Codec clock output.
48	P50/FLD40	COD_CSN	Output	Codec chip select.
49	P47/FLD39	VOL_DA	Output	Data and latch output for electronic.
50	P46/FLD38	VOL_CL	Output	CLK output for electronic VOL IC control signal.
51	P45/FLD37	DIG_FUNC +B	Output	Ext DIG IN ON/OFF control. H: DIG IN ON
52	P44/FLD36	NON_PCM	Input	Audio PCM monitoring input. "L": AUDIO PCM "H": NON AUDIO PCM
53	P43/FLD35	AC_RLY	Output	Main trans ON/OFF control by relay.
54	P42/FLD34	SP_RLY	Output	Speaker output control by relay. H: RELAY ON
55	P41/FLD33	CONFIG	Output	Config setting output subwoofer. "YES" (CONFIG1) WITH "H" "NO" (CONFIG2) WITH "L"
56	P40/FLD32	BASS_SW	Output	Subwoofer amp gain control output. "H": BASS OFF "L": BASS ON
57*	P37/FLD31	NO USE	Input	Not used.
58-73	P36/FLD30-P07/FLD15	SEG16-SEG1	Output	FL segment.
74-80	P06/FLD14-P00/FLD8	DIG15-DIG9	Output	FL digit driver.
81-88	P27/FLD7-P20/FLD0	DIG8-DIG1	Output	FL digit driver.
89	VEE	VEE	Input	VLOAD -35 V.
90	PB6/SIN1	L_MUTE	Output	VCR out audio mute output. H: MUTE ON L: MUTE OFF
91	PB5/SOUT1	W_S_MUTE	Output	Subwoofer speaker S-MUTE output. "H": MUTE ON "L": MUTE OFF
92	PB4/SCLK11	F_S_MUTE	Output	Front speaker S-MUTE output. "H": MUTE ON "L": MUTE OFF
93	PB3/SSYB1	C_S_MUTE	Output	Center speaker S-MUTE output. "H": MUTE ON "L": MUTE OFF
94	PB2/SBUSY1	S_S_MUTE	Output	Surround speaker S-MUTE output. "H": MUTE ON "L": MUTE OFF
95	PB1/SRDY1	S_MUTE	Output	Audio mute output. H: MUTE ON
96	PB0/SCLK12/SVIN/DA	TIMER_LED	Output	Timer stand-by LED. "H": ON "L": OFF
97	AVSS	GND	Input	A/D analog GND.
98	VREF	VREF	Input	A/D reference voltage 5 V.
99	PA7/AN7	AREA	Input	A/D input, destination setting input. H: AUDTTION MODEL L: NORMAL
100	PA6/AN6	KEY1	Input	A/D input, main set key.

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC701 RH-iX0558AWZZ: System Microcomputer (IX0558AW) (Serial No. To 30400813)
IC701 RH-iX0600AWZZ: System Microcomputer (IX0600AW) (Serial No. 30500814~30501208)
IC701 RH-iX0610AWZZ: System Microcomputer (IX0610AW) (Serial No. 30601209~)

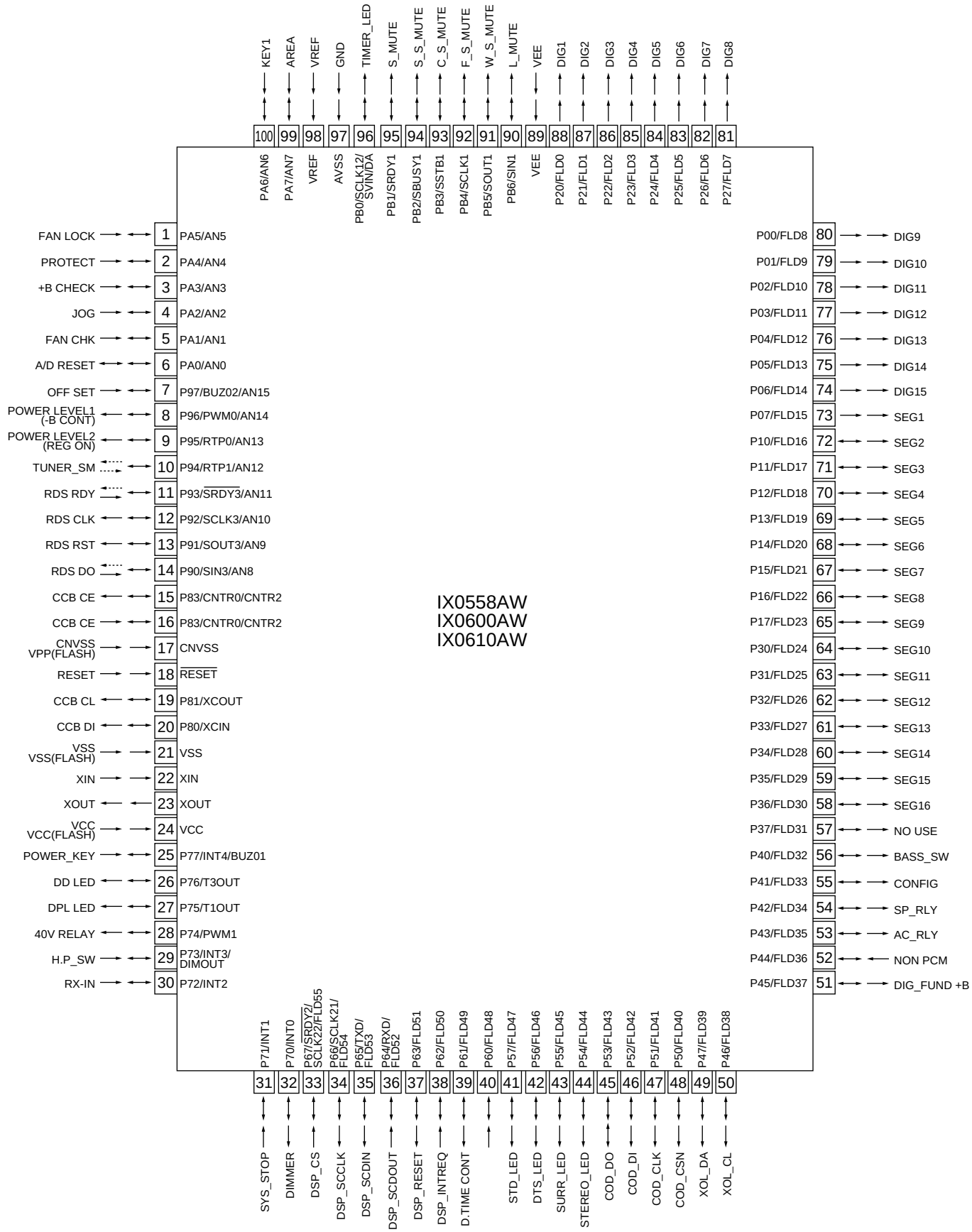


Figure 53 BLOCK DIAGRAM OF IC

ICA100, ICA200, ICA300 RH-iX0498AWZZ: 7th Order ⊿Σ Modulation Conversion LSI (IX0498AW)

Pin No.	Port Name	Input/Output	Function
1	VDDL	Input	L channel digital output section power terminal.
2	OUTL (+)	Output	L channel forward output terminal.
3	OUTL (–)	Output	L channel reverse output terminal.
4	GNDD	—	Digital output section ground terminal.
5	OUTR (–)	Output	R channel reverse output terminal.
6	OUTR (+)	Output	R channel forward output terminal.
7	VDDR	Input	R channel digital output section power terminal.
8	VDDX	Input	Oscillation section power terminal.
9	XI	Input	Quartz oscillator connection terminal. Clock necessary for the system is generated.
10	XO	Output	Quartz oscillator connection terminal. Clock necessary for the system is generated.
11	GNDX	—	Oscillation section ground terminal.
12	MCK	Output	System clock output terminal.
13	TEST	Input	Test terminal. As usual, it is used at "L".
14	NFR1 (+)	Input	R channel forward signal feedback input terminal.
15	NFR2 (–)	Input	R channel reverse signal feedback input terminal.
16	GNDA	—	Analog ground terminal for AD converter.
17	Rch IN	Input	R channel analog input terminal.
18	Rch Vref	Input	Reference voltage terminal for R channel.
19	Lch Vref	Input	Reference voltage terminal for L channel.
20	Lch IN	Input	L channel analog input terminal.
21	RESET	Input	Reset terminal. It is reset with "L".
22	NFL2 (–)	Input	L channel reverse signal feedback input terminal.
23	NFL1 (+)	Input	L channel forward signal feedback input terminal.
24	VDDA	Input	Analog current terminal for AD converter.

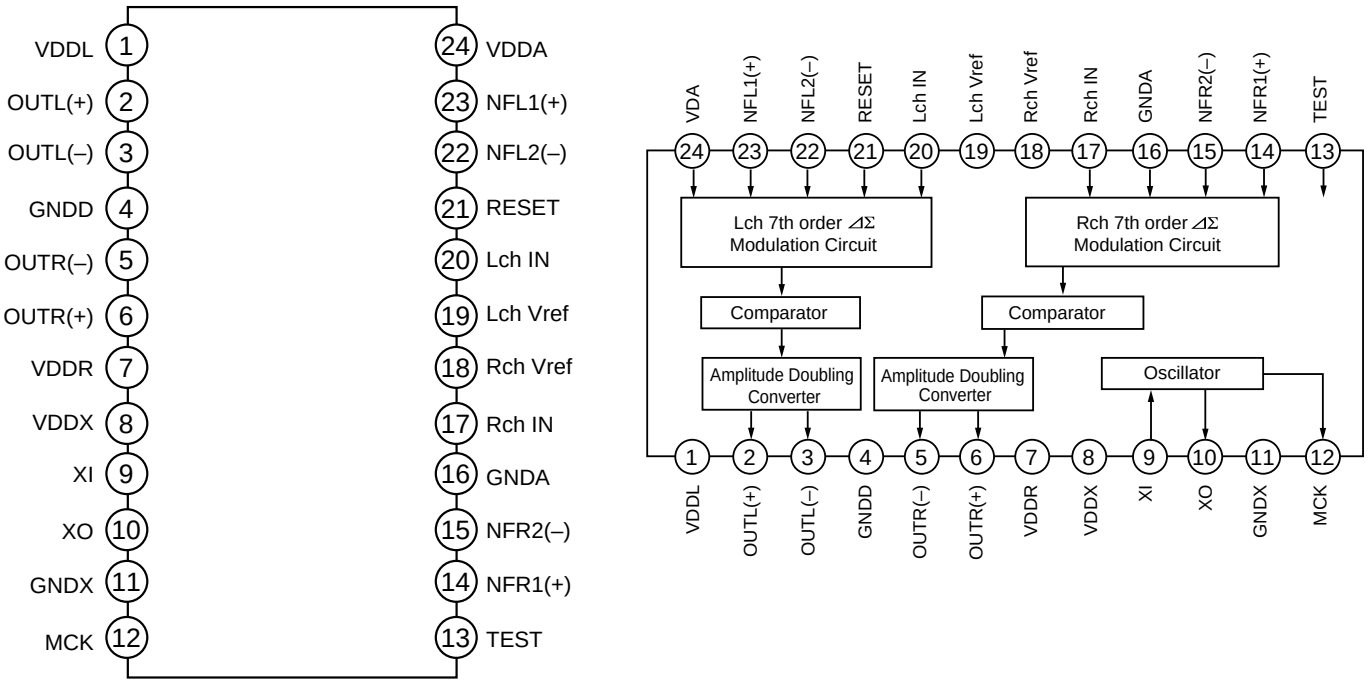


Figure 54 BLOCK DIAGRAM OF IC

ICA101, ICA102, ICA201, ICA202, ICA301, ICA302
VHiSLA5515M-1: Switching Audio Power Amp. (SLA5515M)

Pin No.	Terminal Name	Function
1	SA	Output stage low-side source terminal.
2, 3	OUTA	Output stage switching output.
4, 5	VBBA	Output stage power supply.
6	VBOOTA	Bootstrap condenser terminal.
7, 8	DTADJA, DTADJB	Dead time adjusting terminal.
9	INA	Logic input.
10	VKK	Lowest potential terminal of controller.
11	VCC	Power supply to pre-driver.
12	VKK	Lowest potential terminal of controller.
13	INB	Logic input.
14	GND	Ground for controller.
15	VDD	Power supply to controller.
16	VBOOTB	Bootstrap condenser terminal.
17, 18	VBBB	Output stage power supply.
19, 20	OUTB	Output stage switching output.
21	SB	Output stage low-side source terminal.

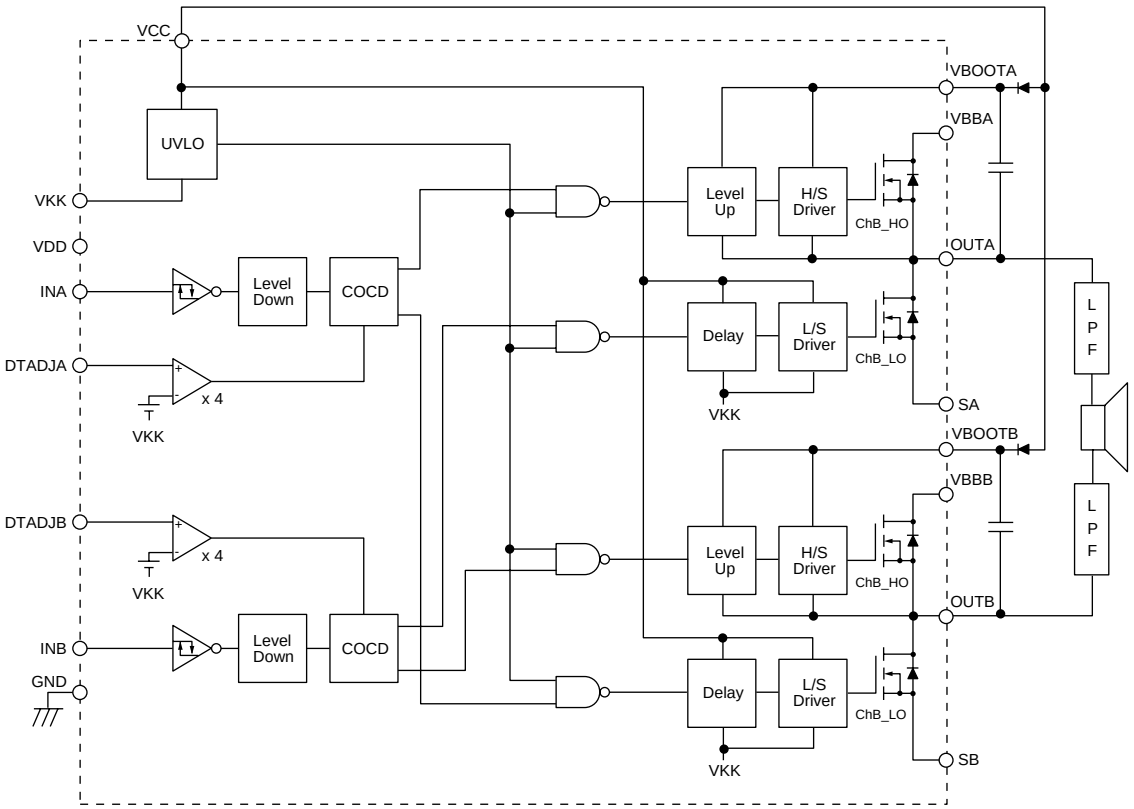


Figure 55 BLOCK DIAGRAM OF IC

— M E M O —

SHARP PARTS GUIDE

1-BIT DIGITAL HOME CINEMA

MODEL SD-AT1000H

SD-AT1000H 1-Bit Digital Home Cinema consisting of SD-AT1000H (main unit), CP-AT1000HF (front speakers), CP-AT1000HC (center speaker), CP-AT1000HR (surround speakers) and CP-AT1000HSW (subwoofer).

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following information.

1. MODEL NUMBER
2. REF. No.
3. PART NO.
4. DESCRIPTION

★ MARK: SPARE PARTS-DELIVERY SECTION

For U.S.A. only

Contact your nearest SHARP Parts Distributor to order.

For location of SHARP Parts Distributor,
Please call Toll-Free;
1-800-BE-SHARP

Explanation of capacitors/resistors parts codes

Capacitors

VCC ..... Ceramic type
VCK..... Ceramic type
VCT ..... Semiconductor type
VC • • MF ..... Cylindrical type (without lead wire)
VC • • MN..... Cylindrical type (without lead wire)
VC • • TV..... Square type (without lead wire)
VC • • TQ ..... Square type (without lead wire)
VC • • CY ..... Square type (without lead wire)
VC • • CZ ..... Square type (without lead wire)
VC • • • • • • • • • J .. The 13th character represents capacity difference.
("J" ±5%, "K" ±10%, "M" ±20%, "N" ±30%,
"C" ±0.25 pF, "D" ±0.5 pF, "Z" +80-20%.)

If there are no indications for the electrolytic capacitors, error is ±20%.

Resistors

VRD ..... Carbon-film type
VRS..... Carbon-film type
VRN ..... Metal-film type
VR • • MF ..... Cylindrical type (without lead wire)
VR • • MN..... Cylindrical type (without lead wire)
VR • • TV..... Square type (without lead wire)
VR • • TQ ..... Square type (without lead wire)
VR • • CY ..... Square type (without lead wire)
VR • • CZ ..... Square type (without lead wire)
VR • • • • • • • • • J .. The 13th character represents error.
("J" ±5%, "F" ±1%, "D" ±0.5%.)

If there are no indications for other parts, the resistors are ±5% carbon-film type.

NOTE:
Parts marked with "⚠" are important for maintaining the safety of the set.
Be sure to replace parts with specified ones for maintaining the safety and performance of the set.

SD-AT1000H

NO.	PART CODE	★	PRICE RANK	DESCRIPTION

SD-AT1000H

INTEGRATED CIRCUITS

IC101	VHICS493264-1	J	BN	DSP,CS493264
IC102	VHIAK4586VQ-1	J	BC	ADC/DAC/DIR Converter, AK4586VQ
IC103	VHITC7WU04U-1	J	AG	Dual2-Input Nand Gate, TC7WU04U
IC104	VHI74HC07AF-1	J	AF	Buffer Amp.,74HC07AF
IC109	VHITC7WU04U-1	J	AG	Dual2-Input Nand Gate, TC7WU04U
IC110	VHISI3050LUS1	J	AG	Voltage Regulator,SI3050LUS
IC111	RH-IX0446AWZZ	J	AL	Voltage Regulator,IX0446AW
IC112	VHISI3033LUS1	J	AG	3.3V Regulator,SI3033LUS
IC306	VHITJM4558CD1	J	AE	Ope Amp.,TJM4558CD
IC411~413	VHITJM4558CD1	J	AE	Ope Amp.,TJM4558CD
IC501	VHIBD3811K1-1	J	AZ	Volume IC,BD3811K1
IC505	VHINJM4565M-1	J	AC	Buffer Amp.,NJM4565M
IC506	VHITJM4558CD1	J	AE	Ope Amp.,TJM4558CD
IC507	VHIKIA7805AP1	J	AF	Voltage Regulator,KIA7805AP
IC513	VHIKIA7809AP1	J	AF	Voltage Regulator,KIA7809AP
IC520	VHITJM4558CD1	J	AE	Ope Amp.,TJM4558CD
IC701	RH-IX0558AWZZ	J	BF	System Microcomputer, IX0558AW (Serial No. To 30400813)
IC701	RH-IX0600AWZZ	J	AW	System Microcomputer, IX0600AW (Serial No. 30500814~30501208)
IC701	RH-IX0610AWZZ	J		System Microcomputer, IX0610AW (Serial No. 30601209~)
IC703	VHIPST9140/-1	J	AG	Reset,PST9140
⚠ IC901	VHISTRF6268-1	J	AY	Switching Regulator,STRF6268
IC931	VHISE-B2+++-1	J	AL	Error Amp.,SE-B2
IC933	VHIKIA7809AP1	J	AF	Voltage Regulator,KIA7809AP
IC934	VHIKIA7805AP1	J	AF	Voltage Regulator,KIA7805AP
IC937	VHIAN77L05+-1	J	AG	Voltage Regulator,AN77L05
ICA100	RH-IX0498AWZZ	J	AZ	7th Order ⊿Σ Modulation Conversion LSI,IX0498AW
ICA101,102	VHISLA5515M-1	J	BB	Switching Audio Power Amp., SLA5515M
ICA200	RH-IX0498AWZZ	J	AZ	7th Order ⊿Σ Modulation Conversion LSI,IX0498AW
ICA201,202	VHISLA5515M-1	J	BB	Switching Audio Power Amp., SLA5515M
ICA300	RH-IX0498AWZZ	J	AZ	7th Order ⊿Σ Modulation Conversion LSI,IX0498AW
ICA301,302	VHISLA5515M-1	J	BB	Switching Audio Power Amp., SLA5515M
ICA401	VHITJM4558CD1	J	AE	Ope Amp.,TJM4558CD
ICT21	VHILC72723/-1	J	AR	RDS Decoder,LC72723

TRANSISTORS

Q102	VSKRA107S//-1	J	AB	Digital,NPN,KRA107 S
Q400	VS2SB709AR+-1	J	AB	Silicon,PNP,2SB709 AR
Q401	VS2SC5565++-1	J	AG	Silicon,NPN,2SC5565
Q402	VSKRC104S//-1	J	AC	Digital,NPN,KRC104 S
Q403	VS2SD601AR/-1	J	AC	Silicon,NPN,2SD601 AR
Q428	VSKRC102S//-1	J	AB	Digital,NPN,KRC102 S
Q429	VSKRA107S//-1	J	AB	Digital,NPN,KRA107 S
Q459	VSCPH3418++-1	J	AG	FET,CPH3418
Q501,502	VSKRA107S//-1	J	AB	Digital,NPN,KRA107 S
Q503,504	VS2SK208///-1	J	AD	FET,2SK208
Q512	VSKRA107S//-1	J	AB	Digital,NPN,KRA107 S
Q513~515	VS2SD601AR/-1	J	AC	Silicon,NPN,2SD601 AR
Q516	VS2SB709AR+-1	J	AB	Silicon,PNP,2SB709 AR
Q517,518	VSKTC2875B/-1	J	AC	Silicon,NPN,KTC2875 B
Q523	VSKRA107S//-1	J	AB	Digital,NPN,KRA107 S
Q524	VS2SD601AR/-1	J	AC	Silicon,NPN,2SD601 AR
Q525	VSKTC4375Y+-1	J	AE	Silicon,NPN,KTC4375 Y
Q526	VSKTA1273Y/-1	J	AE	Silicon,PNP,KTA1273 Y
Q527	VS2SD601AR/-1	J	AC	Silicon,NPN,2SD601 AR
Q528	VSKRC107S//-1	J	AB	Digital,NPN,KRC107 S
Q530	VS2SD601AR/-1	J	AC	Silicon,NPN,2SD601 AR
Q531,532	VSKTC2875B/-1	J	AC	Silicon,NPN,KTC2875 B
Q533	VS2SB709AR+-1	J	AB	Silicon,PNP,2SB709 AR
Q535	VS2SD601AR/-1	J	AC	Silicon,NPN,2SD601 AR
Q536	VSKRA107S//-1	J	AB	Digital,NPN,KRA107 S
Q537	VS2SD601AR/-1	J	AC	Silicon,NPN,2SD601 AR
Q538	VSKRA107S//-1	J	AB	Digital,NPN,KRA107 S
Q539	VS2SD601AR/-1	J	AC	Silicon,NPN,2SD601 AR
Q541	VS2SD601AR/-1	J	AC	Silicon,NPN,2SD601 AR
Q542	VSKRA106S//-1	J	AB	Digital,PNP,KRA106 S
Q543~545	VS2SD601AR/-1	J	AC	Silicon,NPN,2SD601 AR
Q598,599	VSKTC2875B/-1	J	AC	Silicon,NPN,KTC2875 B
Q701,702	VSKRC104M//-1	J	AC	Digital,NPN,KRC104 M
Q703~708	VSKRC107S//-1	J	AB	Digital,NPN,KRC107 S
Q709	VSKRC102S//-1	J	AB	Digital,NPN,KRC102 S
Q710	VS2SB709AR+-1	J	AB	Silicon,PNP,2SB709 AR
Q892	VSKTC3203Y/-1	J	AC	Silicon,NPN,KTC3203 Y
Q895	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q896	VSKRC106M//-1	J	AB	Digital,NPN,KRC106 M
Q931	VSKTA1023Y/-1	J	AE	Silicon,PNP,KTA1023 Y
Q932	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q950	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
⚠ Q951	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
QA400~402	VS2SB709AR+-1	J	AB	Silicon,PNP,2SB709 AR
QA414	VS2SB709AR+-1	J	AB	Silicon,PNP,2SB709 AR
QA415	VS2SD601AR/-1	J	AC	Silicon,NPN,2SD601 AR
QA416	VSKRC104S//-1	J	AC	Digital,NPN,KRC104 S
QS01	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
QS02,03	VSKRA102M//-1	J	AC	Digital,PNP,KRA102 M
QS04	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
QS05	VSKRC107M//-1	J	AC	Digital,NPN,KRC107 M
QS06~08	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
QT21	VSKTC2875B/-1	J	AC	Silicon,NPN,KTC2875 B

DIODES

D2~5	VHDMA111///-1	J	AC	Silicon,MA111
D103~107	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D400,401	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D419	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D501,502	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D507	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D509	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D514	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D516~518	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D525,526	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D537,538	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D581~583	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D701~704	VHDMA111///-1	J	AC	Silicon,MA111
D887	VHDMA111///-1	J	AC	Silicon,MA111
D889,890	VHDMA111///-1	J	AC	Silicon,MA111
D891	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
⚠ D901	VHDD5SB60++-1	J	AK	Silicon,D5SB60
⚠ D902	VHDSARS03++-1	J	AN	Silicon,SARS03
⚠ D905~907	VHDAG01Z+++-1	J	AD	Silicon,AG01Z
D930	VHDFMLG22S+-1	J	AM	Silicon,FMLG22S
D936	VHDEK19++++-1	J	AF	Silicon,EK19
D938,939	VHDEK19++++-1	J	AF	Silicon,EK19
D942,943	VHDAK09++++-1	J	AE	Silicon,AK09
D944	VHDAG01Z+++-1	J	AD	Silicon,AG01Z
D945	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D947	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D949	VHDGD1N4004-1	J	AB	Silicon,GD1N4004
⚠ D950~953	VHDGD1N4004-1	J	AB	Silicon,GD1N4004
D954	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D957	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D960	VHDEK03++++-1	J	AE	Silicon,EK03
D963	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
DA107	VHDKDS121E+-1	J	AC	Silicon,KDS121E
DA108~115	VHDSFPW56++-1	J	AE	Silicon,SFPW56
DA116	VHDKDS120E+-1	J	AC	Silicon,KDS120E
DA130~133	VHDMA111///-1	J	AC	Silicon,MA111
DA207	VHDKDS121E+-1	J	AC	Silicon,KDS121E
DA208~215	VHDSFPW56++-1	J	AE	Silicon,SFPW56
DA216	VHDKDS120E+-1	J	AC	Silicon,KDS120E
DA230~233	VHDMA111///-1	J	AC	Silicon,MA111
DA307	VHDKDS121E+-1	J	AC	Silicon,KDS121E
DA308~315	VHDSFPW56++-1	J	AE	Silicon,SFPW56
DA316	VHDKDS120E+-1	J	AC	Silicon,KDS120E
DA330~333	VHDMA111///-1	J	AC	Silicon,MA111
DA400	VHDKDS120E+-1	J	AC	Silicon,KDS120E
DA401	VHDMA111///-1	J	AC	Silicon,MA111
DA402	VHDKDS121E+-1	J	AC	Silicon,KDS121E
DA403	VHDMA111///-1	J	AC	Silicon,MA111
DA404	VHDKDS120E+-1	J	AC	Silicon,KDS120E
DA405	VHDMA111///-1	J	AC	Silicon,MA111
DA406	VHDKDS226//-1	J	AB	Silicon,KDS226
DS01~03	VHDDS1SS133-1	J	AB	Silicon,DS1SS133

NO.	PART CODE	★	PRICE RANK	DESCRIPTION
LED701	VHP304VT2E3-1	J	AC	LED,Bright Red,304VT2E3
LED702	VHP304BC2E9-1	J	AK	LED,Blue,304BC2E9
LED703	VHP304AT2E+-1	J	AC	LED,Orange,304AT2E
LED704	VHP304GT1U+-1	J	AC	LED,Green,304GT1U
LED705	VHP304AT2E+-1	J	AC	LED,Orange,304AT2E
LED706	VHP304VT2E2-1	J	AC	LED,Red,304VT2E2
LED707	VHP304GT1U+-1	J	AC	LED,Green,304GT1U
LED708	VHP304VT2E2-1	J	AC	LED,Red,304VT2E2
ZD101	VHEDZ2R4BSB-1	J	AB	Zener,2.4V,DZ2.4BSB
ZD102	VHEDZ5R6BSB-1	J	AC	Zener,5.6V,DZ5.6BSB
ZD401	VHEDZ7R5BSB-1	J	AB	Zener,7.5V,DZ7.5BSB
ZD402,403	VHEDZ8R2BSC-1	J	AB	Zener,8.2V,DZ8.2BSC
ZD502,503	VHEDZ8R2BSA-1	J	AB	Zener,8.2V,DZ8.2BSA
ZD557~568	VHEDZ6R2BSC-1	J	AB	Zener,6.2V,DZ6.2BSC
ZD931	VHEHZ4ALL//-1	J	AB	Zener,4V,HZ4ALL
ZD932	VHEDZ330BSD-1	J	AC	Zener,33V,DZ33BSD
ZD934	VHEDZ150BSB-1	J	AB	Zener,15V,DZ15BSB
ZD937	VHEDZ150BSB-1	J	AB	Zener,15V,DZ15BSB

TRANSFORMERS

⚠ T901	RTRNZ0009AWZZ	J	AX	Switching Power
⚠ T903	RTRNP0313AWZZ	J	AN	Power

COILS

L01	VPBNN2R2K0000	J	AC	2.2 µH
L401~403	RCILC0290AFZZ	J	AC	Tip Solid Induction,200mA
L701,702	VPBNN2R2K0000	J	AC	2.2 µH
⚠ L901,902	RCILZ0058AWZZ	J	AK	AC Line Filter
L931	RCILZ0062AWZZ	J	AF	10 µH
LA100~103	RCORF0026AWZZ	J	AB	Coil,Ferrite Core
LA104~107	RCILZ0048AWZZ	J	AM	Coil
LA200~203	RCORF0026AWZZ	J	AB	Coil,Ferrite Core
LA204~207	RCILZ0048AWZZ	J	AM	Coil
LA300~303	RCORF0026AWZZ	J	AB	Coil,Ferrite Core
LA304~307	RCILZ0048AWZZ	J	AM	Coil
LA400	RCORF0020AWZZ	J	AD	Coil,Ferrite Core
LFA100,101	RCILZ0055AWZZ	J	AH	Coil
LFA200,201	RCILZ0055AWZZ	J	AH	Coil
LFA300,301	RCILZ0055AWZZ	J	AH	Coil
LFA400	RCILZ0054AWZZ	J	AH	Coil
LFA402,403	RCILZ0040AWZZ	J	AH	Coil
LT21,22	VP-DH2R2K0000	J	AB	2.2 µH,Peaking

VARIABLE RESISTORS

VRA100	RVR-M0024AWZZ	J	AC	4.7 kohms (B),Semi-VR [R-CH Output Offset Adjustment]
VRA101	RVR-M0024AWZZ	J	AC	4.7 kohms (B),Semi-VR [L-CH Output Offset Adjustment]
VRA200	RVR-M0024AWZZ	J	AC	4.7 kohms (B),Semi-VR [R-CH Output Offset Adjustment]
VRA201	RVR-M0024AWZZ	J	AC	4.7 kohms (B),Semi-VR [L-CH Output Offset Adjustment]
VRA300	RVR-M0024AWZZ	J	AC	4.7 kohms (B),Semi-VR [R-CH Output Offset Adjustment]
VRA301	RVR-M0024AWZZ	J	AC	4.7 kohms (B),Semi-VR [L-CH Output Offset Adjustment]

VIBRATORS

CXA100	RCRSP0030AWZZ	J	AF	Crystal,11.2896 MHz
XL101	RCRSP0031AWZZ	J	AF	Crystal,12.288 MHz
XL701	RCRSP0003AWZZ	J	AH	Crystal,4.19 MHz
XT21	RCRSP0018AWZZ	J	AG	Crystal,4.332 MHz

THERMISTOR

⚠ PS931,932	RH-QX0017AWZZ	J	AG	Posistor,1.5 ohms
⚠ PS933	RH-QX0016AWZZ	J	AK	Posistor,1.6 ohms
⚠ PSA400~402	RH-QX0022AWZZ	J	AF	Posistor
⚠ TH901	RH-QX0020AWZZ	J	AM	Thermistor

CAPACITORS

C14,15	VCKYCY1CB223K	J	AA	0.022 µF,16V
C16	VCKYCY1HB102K	J	AA	0.001 µF,50V
C101~104	VCKYCY1AF105Z	J	AB	1 µF,10V
C105	VCEAZA1HW225M	J	AB	2.2 µF,50V,Electrolytic

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
C106	VCKYCY1HB471K	J	AA	470 pF,50V
C107	VCKYCY1CB103K	J	AA	0.01 µF,16V
C108	VCKYCY1AB104K	J	AC	0.1 µF,10V
C109	VCKYCY1AF105Z	J	AB	1 µF,10V
C110	VCKYCY1CF104Z	J	AB	0.1 µF,16V
C111	VCEAZA1HW225M	J	AB	2.2 µF,50V,Electrolytic
C112~114	VCKYCY1AF105Z	J	AB	1 µF,10V
C115	VCKYTV1CF225Z	J	AC	2.2 µF,16V
C116	VCKYCY1AB104K	J	AC	0.1 µF,10V
C117,118	VCKYCY1AF105Z	J	AB	1 µF,10V
C120	VCKYCY1AB104K	J	AC	0.1 µF,10V
C123	VCKYCY1HB102K	J	AA	0.001 µF,50V
C124	VCKYCY1AF105Z	J	AB	1 µF,10V
C125,126	VCCCCY1HH220J	J	AA	22 pF (CH),50V
C127	VCKYCY1AF105Z	J	AB	1 µF,10V
C132	VCKYCY1AF105Z	J	AB	1 µF,10V
C133	VCKYCY1AB104K	J	AC	0.1 µF,10V
C136	VCKYCY1CF104Z	J	AB	0.1 µF,16V
C137	VCKYCY1AF105Z	J	AB	1 µF,10V
C138~142	VCKYCY1CF104Z	J	AB	0.1 µF,16V
C144~147	VCKYCY1CF104Z	J	AB	0.1 µF,16V
C148~152	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
C153~156	VCKYCY1CF104Z	J	AB	0.1 µF,16V
C163	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C164	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
C165	VCKYCY1HB102K	J	AA	0.001 µF,50V
C166	RC-EZ0004AWZZ	J	AD	3.3 µF,16V,Electrolytic
C167	VCCCCY1HH181J	J	AA	180 pF (CH),50V
C168	VCKYCY1CB103K	J	AA	0.01 µF,16V
C169,170	VCKYPA1HB222K	J	AA	0.0022 µF,50V
C171	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C173	VCKYBT1HB101K	J	AA	100 pF,50V
C183	VCKYCY1HB102K	J	AA	0.001 µF,50V
C184	VCCCCY1HH680J	J	AA	68 pF (CH),50V
C187	VCKYBT1HB102K	J	AA	0.001 µF,50V
C194~196	VCCCCY1HH101J	J	AA	100 pF (CH),50V
C199	VCEAZA1HW475M	J	AB	4.7 µF,50V,Electrolytic
C383	VCEAZA1HW225M	J	AB	2.2 µF,50V,Electrolytic
C401	VCEAZA1CW226M	J	AC	22 µF,16V,Electrolytic
C402	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
C403	VCEAZA1CW476M	J	AB	47 µF,16V,Electrolytic
C404,405	VCKYCY1CB103K	J	AA	0.01 µF,16V
C413,414	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
C415,416	VCCCCY1HH330J	J	AA	33 pF (CH),50V
C417,418	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
C419,420	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C425,426	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
C427,428	VCCCCY1HH330J	J	AA	33 pF (CH),50V
C429,430	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
C431,432	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C437	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
C439	VCCCCY1HH330J	J	AA	33 pF (CH),50V
C440	VCKYCY1HB102K	J	AA	0.001 µF,50V
C441	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
C442	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic
C446	VCKYCY1EF104Z	J	AA	0.1 µF,25V
C447,448	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C450,451	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C459	VCEAZA1CW226M	J	AC	22 µF,16V,Electrolytic
C460	VCEAZA1HW335M	J	AB	3.3 µF,50V,Electrolytic
C501~504	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
C505,506	VCEAZA1CW476M	J	AB	47 µF,16V,Electrolytic
C507,508	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C512,513	VCKYCY1HB153K	J	AA	0.015 µF,50V
C517~520	VCFYDA1HA823J	J	AB	0.082 µF,50V,Polyester
C521,522	VCKYCY1HB472K	J	AA	0.0047 µF,50V
C523,524	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
C525~532	VCEAZA1HW225M	J	AB	2.2 µF,50V,Electrolytic
C533~538	VCKYCY1HB153K	J	AA	0.015 µF,50V
C539,540	VCEAZA1CW476M	J	AB	47 µF,16V,Electrolytic
C561	VCKYCY1EB103K	J	AA	0.01 µF,25V
C562	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C578	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C582	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C583,584	VCEAZA1CW226M	J	AC	22 µF,16V,Electrolytic
C585,586	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic
C587,588	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C594	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic
C595,596	VCEAZA1CW476M	J	AB	47 µF,16V,Electrolytic
C597	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C598	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic
C601	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic

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NO.	PART CODE	★	PRICE RANK	DESCRIPTION
C602,603	VCEAZA1CW226M	J	AC	22 µF,16V,Electrolytic
C604	VCEAEA1HW105M	J	AB	1 µF,50V,Electrolytic
C605	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C606	VCKYCY1EF473Z	J	AB	0.047 µF,25V
C607,608	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C621	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
C625	VCCCCY1HH101J	J	AA	100 pF (CH),50V
C628	VCEAEA1HW105M	J	AB	1 µF,50V,Electrolytic
C629	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C630	VCKYCY1EF473Z	J	AB	0.047 µF,25V
C633,634	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
C637,638	VCCCCY1HH330J	J	AA	33 pF (CH),50V
C639,640	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic
C641,642	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C645,646	VCEAEA1HW105M	J	AB	1 µF,50V,Electrolytic
C647,648	VCKYCY1HB102K	J	AA	0.001 µF,50V
C651,652	VCEAEA1HW105M	J	AB	1 µF,50V,Electrolytic
C653,654	VCKYCY1HB102K	J	AA	0.001 µF,50V
C655,656	VCEAEA1HW105M	J	AB	1 µF,50V,Electrolytic
C657,658	VCKYCY1HB102K	J	AA	0.001 µF,50V
C661,662	VCCCCY1HH470J	J	AA	47 pF (CH),50V
C663,664	VCCCCY1HH101J	J	AA	100 pF (CH),50V
C665,666	VCEAZA1CW227M	J	AC	220 µF,16V,Electrolytic
C671,672	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
C673~676	VCCCCY1HH101J	J	AA	100 pF (CH),50V
C677,678	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
C679,680	VCEAZA1CW476M	J	AB	47 µF,16V,Electrolytic
C681,682	VCKYCY1EF104Z	J	AA	0.1 µF,25V
C696	VCEAZA1CW226M	J	AC	22 µF,16V,Electrolytic
C697,698	VCKYCY1HB102K	J	AA	0.001 µF,50V
C699	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic
C701	VCEAEA1HW105M	J	AB	1 µF,50V,Electrolytic
C702	VCCCCY1HH151J	J	AA	150 pF (CH),50V
C703	RC-EZD106AF1C	J	AB	10 µF,16V,Electrolytic
C704~713	VCCCCY1HH101J	J	AA	100 pF (CH),50V
C714	VCCCCY1HH120J	J	AA	12 pF (CH),50V
C715	VCCCCY1HH180J	J	AA	18 pF (CH),50V
C716	VCKYCY1CF104Z	J	AB	0.1 µF,16V
C717	VCEAZA1CW227M	J	AC	220 µF,16V,Electrolytic
C718	VCEAEA1HW105M	J	AB	1 µF,50V,Electrolytic
C720	VCKYCY1HB102K	J	AA	0.001 µF,50V
C721	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C722	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
C723	VCCCCY1HH151J	J	AA	150 pF (CH),50V
C724	RC-EZD106AF1C	J	AB	10 µF,16V,Electrolytic
C725	VCEAZA1AW477M	J	AC	470 µF,10V,Electrolytic
C726	VCKYCY1CF104Z	J	AB	0.1 µF,16V
C727	VCEAZA1HW475M	J	AB	4.7 µF,50V,Electrolytic
C750	VCKYCY1AF105Z	J	AB	1 µF,10V
C751,752	VCKYCY1CB103K	J	AA	0.01 µF,16V
C842	VCKYCY1HB221K	J	AA	220 pF,50V
C844	VCKYCY1HB221K	J	AA	220 pF,50V
C846~848	VCKYCY1HB221K	J	AA	220 pF,50V
C850	VCKYCY1HB102K	J	AA	0.001 µF,50V
C851	VCFYFA1HA334J	J	AC	0.33 µF,50V,Thin Film
C869	VCKYPA1HB222K	J	AA	0.0022 µF,50V
C871	VCKYPA1HB103K	J	AA	0.01 µF,50V
C872	VCKYPA1HB222K	J	AA	0.0022 µF,50V
C873~878	VCKYCY1HB102K	J	AA	0.001 µF,50V
C881~885	VCKYCY1HB221K	J	AA	220 pF,50V
C887,888	VCKYCY1HB221K	J	AA	220 pF,50V
C899	VCKYPA1HB103K	J	AA	0.01 µF,50V
⚠ C901	RC-QZ0034AWZZ	J	AE	0.33 µF,250V
⚠ C902	RC-QZ0030AWZZ	J	AD	0.1 µF,250V
⚠ C903,904	RC-KZ0089GEZZ	J	AC	0.001 µF,250V,Ceramic
⚠ C905	RC-KZ0105GEZZ	J	AE	0.0022 µF,250V
⚠ C906~909	RC-KZ007LAWZZ	J	AD	0.0022 µF,250V
C910	VCQPKA2AA332J	J	AB	0.0033 µF,100V,Polypropylene
⚠ C911	RC-EZ0129AWZZ	J	AT	220 µF,400V,Electrolytic
⚠ C912	RC-QZ0031AWZZ	J	AE	3300 µF,630V
⚠ C913,914	RC-KZ001LAWZZ	J	AB	0.0047 µF,250V,Ceramic
⚠ C915	RC-KZ0011AWZZ	J	AE	680 pF,3.15 kV
⚠ C916	VCKYCY1HB221K	J	AA	220 pF,50V
⚠ C917	VCKYCY1HB152K	J	AA	0.0015 µF,50V
⚠ C918	VCEA4U1HN475M	J	AC	4.7 µF,50V,Electrolytic
⚠ C919	RC-EZ0099AWZZ	J	AC	33 µF,35V,Electrolytic
⚠ C920	VCKYPA1HB152K	J	AA	0.0015 µF,50V
⚠ C921	VCKYCY1HB103K	J	AA	0.01 µF,50V
⚠ C922	RC-QZ0030AWZZ	J	AD	0.1 µF,250V
C930	RC-QZ0028AWZZ	J	AE	0.0047 µF,630V
C932,933	RC-EZ0120AWZZ	J	AL	2200 µF,50V,Electrolytic
C935	RC-EZ0122AWZZ	J	AC	100 µF,10V,Electrolytic

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
C937	RC-EZ0121AWZZ	J	AD	100 µF,63V,Electrolytic
C938	RC-EZ0097AWZZ	J	AF	1000 µF,25V,Electrolytic
C939	VCKYPA1HB331K	J	AA	330 pF,50V
C940	VCEAZW1HW228M	J	AH	2200 µF,50V,Electrolytic
C941,942	RC-EZ0097AWZZ	J	AF	1000 µF,25V,Electrolytic
C945	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C946	VCQYKA1HM473K	J	AB	0.047 µF,50V,Mylar
C948	RC-EZ0121AWZZ	J	AD	100 µF,63V,Electrolytic
C949,950	VCEAZA1HW476M	J	AB	47 µF,50V,Electrolytic
C951,952	VCQPKA2AA332J	J	AB	0.0033 µF,100V,Polypropylene
C953	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C954,955	VCQYKA1HM473K	J	AB	0.047 µF,50V,Mylar
C956	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C957,958	VCQYKA1HM473K	J	AB	0.047 µF,50V,Mylar
C961	VCEAEA1HW105M	J	AB	1 µF,50V,Electrolytic
C962	VCQPKA2AA332J	J	AB	0.0033 µF,100V,Polypropylene
C963	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
⚠ C965,966	VCKYTV1HB473K	J	AA	0.047 µF,50V
C967	VCEAZA1EW477M	J	AD	470 µF,25V,Electrolytic
C968	VCEAEA1HW105M	J	AB	1 µF,50V,Electrolytic
C969,970	VCQYKA1HM473K	J	AB	0.047 µF,50V,Mylar
C971	VCEAZA1EW107M	J	AB	100 µF,25V,Electrolytic
C983	VCKYPA1HB103K	J	AA	0.01 µF,50V
C984	VCQYKA1HM104K	J	AB	0.1 µF,50V,Mylar
C988	VCEAZA1AW477M	J	AC	470 µF,10V,Electrolytic
C995	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C997	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C998	VCKYPA1HB222K	J	AA	0.0022 µF,50V
CA100~103	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
CA104,105	VCKYCY1HB102K	J	AA	0.001 µF,50V
CA110	VCCCCY1HH101J	J	AA	100 pF (CH),50V
CA114~117	VCKYCY1HB102K	J	AA	0.001 µF,50V
CA123,124	VCCCCY1HH180J	J	AA	18 pF (CH),50V
CA130	VCKYCY1HB102K	J	AA	0.001 µF,50V
CA131	VCKYCY1EF104Z	J	AA	0.1 µF,25V
CA132	VCEAZA1AW476M	J	AB	47 µF,10V,Electrolytic
CA134,135	VCKYCY1EF104Z	J	AA	0.1 µF,25V
CA137	VCKYCY1HB102K	J	AA	0.001 µF,50V
CA138	VCKYCY1EF104Z	J	AA	0.1 µF,25V
CA141~144	VCKYCY1EF104Z	J	AA	0.1 µF,25V
CA145,146	VCKYTV1HB334K	J	AC	0.33 µF,50V
CA149,150	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic
CA151,152	VCKYCY1EF104Z	J	AA	0.1 µF,25V
CA153,154	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
CA155,156	VCKYCY1EF104Z	J	AA	0.1 µF,25V
CA159,160	VCKYTV1HB334K	J	AC	0.33 µF,50V
CA165,166	RC-KZ0007AWZZ	J	AG	1 µF,25V,Electrolytic
CA175	RC-KZ0007AWZZ	J	AG	1 µF,25V,Electrolytic
CA178	RC-KZ0007AWZZ	J	AG	1 µF,25V,Electrolytic
CA179~182	VCFYFA1HA155J	J	AF	1.5 µF,50V,Thin Film
CA183~186	VCKYCY1HB103K	J	AA	0.01 µF,50V
CA187,188	VCFYFA1HA224J	J	AC	0.22 µF,50V,Thin Film
CA189	VCCCCY1HH7R0D	J	AA	7 pF (CH),50V
CA192,193	VCKYCY1HB102K	J	AA	0.001 µF,50V
CA194	VCEAZA1HW107M	J	AC	100 µF,50V,Electrolytic
CA196,197	VCFYFA1HA224J	J	AC	0.22 µF,50V,Thin Film
CA199	VCEAZA1AW476M	J	AB	47 µF,10V,Electrolytic
CA200~203	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
CA204,205	VCKYCY1HB102K	J	AA	0.001 µF,50V
CA210	VCCCCY1HH101J	J	AA	100 pF (CH),50V
CA214~217	VCKYCY1HB102K	J	AA	0.001 µF,50V
CA230	VCKYCY1HB102K	J	AA	0.001 µF,50V
CA231	VCKYCY1EF104Z	J	AA	0.1 µF,25V
CA232	VCEAZA1AW476M	J	AB	47 µF,10V,Electrolytic
CA234,235	VCKYCY1EF104Z	J	AA	0.1 µF,25V
CA237	VCKYCY1HB102K	J	AA	0.001 µF,50V
CA238	VCKYCY1EF104Z	J	AA	0.1 µF,25V
CA241~244	VCKYCY1EF104Z	J	AA	0.1 µF,25V
CA245,246	VCKYTV1HB334K	J	AC	0.33 µF,50V
CA249,250	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic
CA251,252	VCKYCY1EF104Z	J	AA	0.1 µF,25V
CA253,254	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
CA255,256	VCKYCY1EF104Z	J	AA	0.1 µF,25V
CA259,260	VCKYTV1HB334K	J	AC	0.33 µF,50V
CA265,266	RC-KZ0007AWZZ	J	AG	1 µF,25V,Electrolytic
CA275	RC-KZ0007AWZZ	J	AG	1 µF,25V,Electrolytic
CA278	RC-KZ0007AWZZ	J	AG	1 µF,25V,Electrolytic
CA279~282	VCFYFA1HA155J	J	AF	1.5 µF,50V,Thin Film
CA283~286	VCKYCY1HB103K	J	AA	0.01 µF,50V
CA287,288	VCFYFA1HA224J	J	AC	0.22 µF,50V,Thin Film
CA292,293	VCKYCY1HB102K	J	AA	0.001 µF,50V
CA294	VCEAZA1HW107M	J	AC	100 µF,50V,Electrolytic

NO.	PART CODE	★	PRICE RANK	DESCRIPTION
CA296,297	VCFYFA1HA224J	J	AC	0.22 µF,50V,Thin Film
CA299	VCEAZA1AW476M	J	AB	47 µF,10V,Electrolytic
CA300~303	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
CA304,305	VCKYCY1HB102K	J	AA	0.001 µF,50V
CA310	VCCCCY1HH101J	J	AA	100 pF (CH),50V
CA314~317	VCKYCY1HB102K	J	AA	0.001 µF,50V
CA330	VCKYCY1HB102K	J	AA	0.001 µF,50V
CA331	VCKYCY1EF104Z	J	AA	0.1 µF,25V
CA332	VCEAZA1AW476M	J	AB	47 µF,10V,Electrolytic
CA334,335	VCKYCY1EF104Z	J	AA	0.1 µF,25V
CA337	VCKYCY1HB102K	J	AA	0.001 µF,50V
CA338	VCKYCY1EF104Z	J	AA	0.1 µF,25V
CA341~344	VCKYCY1EF104Z	J	AA	0.1 µF,25V
CA345,346	VCKYTV1HB334K	J	AC	0.33 µF,50V
CA349,350	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic
CA351,352	VCKYCY1EF104Z	J	AA	0.1 µF,25V
CA353,354	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
CA355,356	VCKYCY1EF104Z	J	AA	0.1 µF,25V
CA359,360	VCKYTV1HB334K	J	AC	0.33 µF,50V
CA365,366	RC-KZ0007AWZZ	J	AG	1 µF,25V,Electrolytic
CA375	RC-KZ0007AWZZ	J	AG	1 µF,25V,Electrolytic
CA378	RC-KZ0007AWZZ	J	AG	1 µF,25V,Electrolytic
CA379~382	VCFYFA1HA155J	J	AF	1.5 µF,50V,Thin Film
CA383~386	VCKYCY1HB103K	J	AA	0.01 µF,50V
CA387,388	VCFYFA1HA224J	J	AC	0.22 µF,50V,Thin Film
CA392,393	VCKYCY1HB102K	J	AA	0.001 µF,50V
CA394	VCEAZA1HW107M	J	AC	100 µF,50V,Electrolytic
CA396,397	VCFYFA1HA224J	J	AC	0.22 µF,50V,Thin Film
CA399	VCEAZA1AW476M	J	AB	47 µF,10V,Electrolytic
CA402	VCKYCY1HB102K	J	AA	0.001 µF,50V
CA404,405	VCKYCY1EF104Z	J	AA	0.1 µF,25V
CA406	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
CA407	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
CA408	VCKYCY1EB103K	J	AA	0.01 µF,25V
CA409	VCKYCY1EF104Z	J	AA	0.1 µF,25V
CA410	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
CA411	VCKYCY1EF104Z	J	AA	0.1 µF,25V
CA412	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
CA413	VCKYCY1EF104Z	J	AA	0.1 µF,25V
CA417,418	VCKYCY1EF104Z	J	AA	0.1 µF,25V
CS01	VCTYPA1EX473M	J	AA	0.047 µF,25V
CS02	VCEAZA1HW475M	J	AB	47 µF,50V,Electrolytic
CS03	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
CS04	VCQYKA1HM473K	J	AB	0.047 µF,50V,Mylar
CT21	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
CT22	VCKYCY1EF223Z	J	AB	0.022 µF,25V
CT23	VCCCCY1HH220J	J	AA	22 pF (CH),50V
CT25	VCCCCY1HH220J	J	AA	22 pF (CH),50V
CT26	VCKYCY1HB561K	J	AA	560 pF,50V
CT27~30	VCKYCY1EF223Z	J	AB	0.022 µF,25V
CT31,32	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic

RESISTORS

	VRD-ST2CD000J	J	AA	0 ohm,Jumper
	VRS-CY1JB000J	J	AA	0 ohm,Jumper,0.8×1.55mm,Green
	VRS-TV2AB000J	J	AA	0 ohm,Jumper,1.25×2mm,Green
R14,15	VRS-CY1JB680J	J	AA	68 ohms,1/16W
R101	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R102~105	VRS-CY1JB332J	J	AA	3.3 kohms,1/16W
R106~113	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R114~116	VRS-CY1JB332J	J	AA	3.3 kohms,1/16W
R117,118	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R119	VRS-CY1JB101J	J	AA	100 ohm,1/16W
R120	VRS-CY1JB333J	J	AA	33 kohms,1/16W
R121	VRS-CY1JB331J	J	AA	330 ohms,1/16W
R123,124	VRS-CY1JB472J	J	AA	4.7 kohms,1/16W
R125,126	VRS-CY1JB331J	J	AA	330 ohms,1/16W
R127,128	VRS-CY1JB101J	J	AA	100 ohm,1/16W
R129	VRS-CY1JB4R7J	J	AA	4.7 ohms,1/16W
R130	VRS-CY1JB183J	J	AA	18 kohms,1/16W
R132	VRS-CY1JB471J	J	AA	470 ohms,1/16W
R133	VRS-CY1JB153J	J	AA	15 kohms,1/16W
R134	VRS-CY1JB4R7J	J	AA	4.7 ohms,1/16W
R138	VRS-CY1JB473J	J	AA	47 kohms,1/16W
R139~141	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R144	VRS-CY1JB151J	J	AA	150 ohms,1/16W
R146,147	VRS-CY1JB473J	J	AA	47 kohms,1/16W
R148	VRS-CY1JB105J	J	AA	1 Mohm,1/16W
R149	VRS-CY1JB471J	J	AA	470 ohms,1/16W
R150	VRS-CY1JB151J	J	AA	150 ohms,1/16W
R151,152	VRS-CY1JB473J	J	AA	47 kohms,1/16W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
R193	VCCCCY1HH101J	J	AA	100 pF (CH),50V
R194~196	VRS-CY1JB332J	J	AA	3.3 kohms,1/16W
R197~199	VRS-CY1JB122J	J	AA	1.2 kohms,1/16W
R383	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R400	VRS-CY1JB222J	J	AA	2.2 kohms,1/16W
R401	VRS-CY1JB104J	J	AA	100 kohm,1/16W
⚠ R402	RH-QX0006AWZZ	J	AE	Posistor,4.7 ohms
R404	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R405	VRS-CY1JB221J	J	AA	220 ohms,1/16W
R406,407	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R409	VRS-CY1JB223J	J	AA	22 kohms,1/16W
R410	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R411,412	VRS-CY1JB222J	J	AA	2.2 kohms,1/16W
R413	VRS-CY1JB821J	J	AA	820 ohms,1/16W
R414	VRS-CY1JB392J	J	AA	3.9 kohms,1/16W
R415,416	VRS-CY1JB104J	J	AA	100 kohm,1/16W
R417,418	VRS-CY1JB223J	J	AA	22 kohms,1/16W
R419,420	VRS-CY1JB472J	J	AA	4.7 kohms,1/16W
R421,422	VRS-CY1JB392J	J	AA	3.9 kohms,1/16W
R423~426	VRS-CY1JB332J	J	AA	3.3 kohms,1/16W
R427	VRS-CY1JB152J	J	AA	1.5 kohms,1/16W
R428	VRS-CY1JB562J	J	AA	5.6 kohms,1/16W
R431,432	VRS-CY1JB332J	J	AA	3.3 kohms,1/16W
R433	VRS-CY1JB104J	J	AA	100 kohm,1/16W
R435,436	VRS-CY1JB104J	J	AA	100 kohm,1/16W
R437,438	VRS-CY1JB223J	J	AA	22 kohms,1/16W
R439,440	VRS-CY1JB472J	J	AA	4.7 kohms,1/16W
R441,442	VRS-CY1JB392J	J	AA	3.9 kohms,1/16W
R443~446	VRS-CY1JB332J	J	AA	3.3 kohms,1/16W
R451	VRS-CY1JB332J	J	AA	3.3 kohms,1/16W
R452	VRS-CY1JB152J	J	AA	1.5 kohms,1/16W
R455	VRS-CY1JB104J	J	AA	100 kohm,1/16W
R457	VRS-CY1JB223J	J	AA	22 kohms,1/16W
R459	VRS-CY1JB472J	J	AA	4.7 kohms,1/16W
R460	VRS-CY1JB183J	J	AA	18 kohms,1/16W
R461	VRS-CY1JB392J	J	AA	3.9 kohms,1/16W
R462	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R463	VRS-CY1JB332J	J	AA	3.3 kohms,1/16W
R464	VRS-CY1JB682J	J	AA	6.8 kohms,1/16W
R465,466	VRS-CY1JB332J	J	AA	3.3 kohms,1/16W
R473	VRS-CY1JB332J	J	AA	3.3 kohms,1/16W
R492	VRS-CY1JB152J	J	AA	1.5 kohms,1/16W
R493	VRS-CY1JB105J	J	AA	1 Mohm,1/16W
R500,501	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R502,503	VRS-CY1JB822J	J	AA	8.2 kohms,1/16W
R504,505	VRS-CY1JB472J	J	AA	4.7 kohms,1/16W
R506	VRS-CY1JB822J	J	AA	8.2 kohms,1/16W
R507,508	VRS-CY1JB104J	J	AA	100 kohm,1/16W
R509,510	VRS-CY1JB182J	J	AA	1.8 kohms,1/16W
R511,512	VRS-CY1JB221J	J	AA	220 ohms,1/16W
R513,514	VRS-CY1JB104J	J	AA	100 kohm,1/16W
R515,516	VRS-CY1JB221J	J	AA	220 ohms,1/16W
R517,518	VRS-CY1JB104J	J	AA	100 kohm,1/16W
R519,520	VRS-CY1JB221J	J	AA	220 ohms,1/16W
R521,522	VRS-CY1JB104J	J	AA	100 kohm,1/16W
R523	VRS-CY1JB822J	J	AA	8.2 kohms,1/16W
R531,532	VRS-CY1JB222J	J	AA	2.2 kohms,1/16W
R535,536	VRS-CY1JB183J	J	AA	18 kohms,1/16W
R537	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R538	VRS-CY1JB822J	J	AA	8.2 kohms,1/16W
R541	VRD-ST2EE151J	J	AA	150 ohms,1/4W
R543	VRS-CY1JB822J	J	AA	8.2 kohms,1/16W
R544	VRD-ST2EE151J	J	AA	150 ohms,1/4W
R550	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R551	VRS-CY1JB153J	J	AA	15 kohms,1/16W
R552	VRS-CY1JB273J	J	AA	27 kohms,1/16W
R553	VRS-CY1JB683J	J	AA	68 kohms,1/16W
R554	VRS-CY1JB223J	J	AA	22 kohms,1/16W
R560	VRS-CY1JB272J	J	AA	2.7 kohms,1/16W
R561,562	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R563,564	VRS-CY1JB222J	J	AA	2.2 kohms,1/16W
R565	VRS-CY1JB104J	J	AA	100 kohm,1/16W
R566	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R568	VRS-CY1JB121J	J	AA	120 ohms,1/16W
R571	VRS-CY1JB471J	J	AA	470 ohms,1/16W
R572	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R573	VRS-CY1JB224J	J	AA	220 kohms,1/16W
R574	VRS-CY1JB272J	J	AA	2.7 kohms,1/16W
R575	VRS-CY1JB121J	J	AA	120 ohms,1/16W
R577	VRS-CY1JB471J	J	AA	470 ohms,1/16W
R578	VRS-CY1JB224J	J	AA	220 kohms,1/16W
R581	VRS-CY1JB103J	J	AA	10 kohm,1/16W

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NO.	PART CODE	★	PRICE RANK	DESCRIPTION
R583,584	VRS-CY1JB104J	J	AA	100 kohm,1/16W
R585,586	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R587,588	VRS-CY1JB823J	J	AA	82 kohms,1/16W
R590~592	VRD-ST2EE820J	J	AA	82 ohms,1/4W
R593~595	VRS-CY1JB104J	J	AA	100 kohm,1/16W
R596	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R597,598	VRS-CY1JB222J	J	AA	2.2 kohms,1/16W
R599	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R600	VRS-CY1JB562J	J	AA	5.6 kohms,1/16W
R601,602	VRS-CY1JB473J	J	AA	47 kohms,1/16W
R603	VRS-CY1JB562J	J	AA	5.6 kohms,1/16W
R604,605	VRS-CY1JB473J	J	AA	47 kohms,1/16W
R606	VRS-CY1JB474J	J	AA	470 kohms,1/16W
R607	VRS-CY1JB224J	J	AA	220 kohms,1/16W
R608	VRS-CY1JB683J	J	AA	68 kohms,1/16W
R611	VRD-RT2HD330J	J	AA	33 ohms,1/2W
R612	VRD-RT2HD470J	J	AA	47 ohms,1/2W
R613,614	VRS-CY1JB473J	J	AA	47 kohms,1/16W
R615	VRS-CY1JB474J	J	AA	470 kohms,1/16W
R616	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R619	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R621	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R626,627	VRD-ST2EE151J	J	AA	150 ohms,1/4W
R629	VRS-CY1JB332J	J	AA	3.3 kohms,1/16W
R630	VRS-CY1JB222J	J	AA	2.2 kohms,1/16W
R631,632	VRS-CY1JB682J	J	AA	6.8 kohms,1/16W
R633,634	VRS-CY1JB183J	J	AA	18 kohms,1/16W
R635,636	VRS-CY1JB682J	J	AA	6.8 kohms,1/16W
R637,638	VRS-CY1JB183J	J	AA	18 kohms,1/16W
R639,640	VRS-CY1JB682J	J	AA	6.8 kohms,1/16W
R641,642	VRS-CY1JB183J	J	AA	18 kohms,1/16W
R647	VRD-ST2EE820J	J	AA	82 ohms,1/4W
R648,649	VRS-CY1JB104J	J	AA	100 kohm,1/16W
R653	VRS-CY1JB474J	J	AA	470 kohms,1/16W
R654	VRS-CY1JB333J	J	AA	33 kohms,1/16W
R655	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R656	VRS-CY1JB473J	J	AA	47 kohms,1/16W
R657	VRS-CY1JB333J	J	AA	33 kohms,1/16W
R658	VRS-CY1JB473J	J	AA	47 kohms,1/16W
R661	VRS-CY1JB104J	J	AA	100 kohm,1/16W
R666	VRD-ST2CD101J	J	AA	100 ohm,1/6W
R669,670	VRS-CY1JB153J	J	AA	15 kohms,1/16W
R671,672	VRS-CY1JB101J	J	AA	100 ohm,1/16W
R673,674	VRS-CY1JB104J	J	AA	100 kohm,1/16W
R675,676	VRS-CY1JB223J	J	AA	22 kohms,1/16W
R677,678	VRS-CY1JB153J	J	AA	15 kohms,1/16W
R679,680	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R681,682	VRS-CY1JB104J	J	AA	100 kohm,1/16W
R683	VRD-ST2CD181J	J	AA	180 ohms,1/6W
R684	VRD-ST2EE181J	J	AA	180 ohms,1/4W
R689	VRD-RT2HD100J	J	AA	10 ohm,1/2W
R690	VRD-RT2HD470J	J	AA	47 ohms,1/2W
R701~706	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R707	VRS-CY1JB222J	J	AA	2.2 kohms,1/16W
R708~713	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R715~726	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R727	VRS-CY1JB472J	J	AA	4.7 kohms,1/16W
R728	VRS-CY1JB821J	J	AA	820 ohms,1/16W
R729~731	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R733~736	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R737~739	VRS-CY1JB222J	J	AA	2.2 kohms,1/16W
R740	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R742	VRS-CY1JB222J	J	AA	2.2 kohms,1/16W
R745	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R747	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R748~751	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R752	VRS-CY1JB472J	J	AA	4.7 kohms,1/16W
R753	VRS-CY1JB272J	J	AA	2.7 kohms,1/16W
R754,755	VRS-CY1JB472J	J	AA	4.7 kohms,1/16W
R756~760	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R761	VRS-CY1JB271J	J	AA	270 ohms,1/16W
R762~765	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R767~777	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R779~782	VRS-CY1JB332J	J	AA	3.3 kohms,1/16W
R788~790	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R791	VRS-CY1JB123J	J	AA	12 kohms,1/16W
R793	VRS-CY1JB104J	J	AA	100 kohm,1/16W
R794	VRS-CY1JB182J	J	AA	1.8 kohms,1/16W
R795	VRS-CY1JB152J	J	AA	1.5 kohms,1/16W
R796	VRS-CY1JB122J	J	AA	1.2 kohms,1/16W
R797	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R798	VRS-CY1JB103J	J	AA	10 kohm,1/16W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
R799	VRS-CY1JB392J	J	AA	3.9 kohms,1/16W
R855	VRS-CY1JB183D	J	AA	18 kohms,1/16W
R857,858	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R859	VRS-CY1JB333J	J	AA	33 kohms,1/16W
R861,862	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R863	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R864	VRD-ST2CD104J	J	AA	100 kohm,1/6W
R867	VRS-CY1JB222D	J	AA	2.2 kohms,1/16W
R868	VRS-CY1JB183D	J	AA	18 kohms,1/16W
R869	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
R870	VRD-ST2CD221J	J	AA	220 ohms,1/6W
R871	VRN-CM05N0R1J	J	AD	0.1 ohm,5W
R874	VRD-ST2CD680J	J	AA	68 ohms,1/6W
R879	VRS-CY1JB183D	J	AA	18 kohms,1/16W
R880	VRS-CY1JB184D	J	AA	180 kohms,1/16W
R881	VRS-CY1JB183D	J	AA	18 kohms,1/16W
R882	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R883,884	VRS-CY1JB183D	J	AA	18 kohms,1/16W
R885	VRS-CY1JB222D	J	AA	2.2 kohms,1/16W
R886	VRS-CY1JB103D	J	AA	10 kohm,1/16W
R888	VRD-RT2HD392J	J	AA	3.9 kohms,1/2W
R889	VRD-ST2EE1R5J	J	AA	1.5 ohms,1/4W
R890	VRD-ST2EE1R2J	J	AA	1.2 ohms,1/4W
R891	VRS-CY1JB184D	J	AA	180 kohms,1/16W
R892	VRS-CY1JB103D	J	AA	10 kohm,1/16W
R893	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R894	VRD-ST2CD104J	J	AA	100 kohm,1/6W
R895	VRS-CY1JB333J	J	AA	33 kohms,1/16W
R896	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R898	VRD-ST2CD124J	J	AA	120 kohms,1/6W
R899	VRS-CY1JB333J	J	AA	33 kohms,1/16W
⚠ R901	VRD-RT2HD394J	J	AB	390 kohms,1/2W
⚠ R903	VRD-ST2EE105J	J	AA	1 Mohm,1/4W
⚠ R905,906	VRS-VV3DA473J	J	AB	47 kohms,2W
⚠ R907,908	RR-FZ0009AWZZ	J	AD	0.18 ohms,2W
⚠ R910	VRD-RT2HD220J	J	AA	22 ohms,1/2W
R913	VRD-RT2HD680J	J	AA	68 ohms,1/2W
⚠ R914	VRD-ST2CD332J	J	AA	3.3 kohms,1/6W
⚠ R915	VRD-ST2CD154J	J	AA	150 kohms,1/6W
⚠ R916	VRD-ST2CD152J	J	AA	1.5 kohms,1/6W
⚠ R917	VRS-VV3DA104J	J		100 kohm,2W
⚠ R918	VRD-ST2CD221J	J	AA	220 ohms,1/6W
R930	VRD-ST2CD272J	J	AA	2.7 kohms,1/6W
R931	VRD-ST2CD392J	J	AA	3.9 kohms,1/6W
R932	VRD-ST2CD563J	J	AA	56 kohms,1/6W
R933	VRD-ST2CD122J	J	AA	1.2 kohms,1/6W
R958	VRD-RT2HD5R6J	J	AA	5.6 ohms,1/2W
R960	VRD-RT2HD5R6J	J	AA	5.6 ohms,1/2W
R961	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R962	VRD-RT2HD680J	J	AA	68 ohms,1/2W
R963	VRD-ST2EE332J	J	AA	3.3 kohms,1/4W
R964	VRD-ST2CD101J	J	AA	100 ohm,1/6W
R965	VRD-ST2CD333J	J	AA	33 kohms,1/6W
R966	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R967	VRD-ST2CD104J	J	AA	100 kohm,1/6W
R968	VRD-ST2CD123J	J	AA	12 kohms,1/6W
R969,970	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R971	VRD-ST2EE152J	J	AA	1.5 kohms,1/4W
R980	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R983	VRD-ST2CD102J	J	AA	1 kohm,1/6W
⚠ R995	VRD-ST2CD224J	J	AA	220 kohms,1/6W
R996	VRD-ST2CD561J	J	AA	560 ohms,1/6W
R997	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R998	VRD-ST2CD473J	J	AA	47 kohms,1/6W
⚠ R999	VRD-ST2CD332J	J	AA	3.3 kohms,1/6W
RA104~107	VRS-CY1JB124D	J	AA	120 kohms,1/16W
RA108,109	VRS-CY1JB203D	J	AB	20 kohms,1/16W
RA122,123	VRS-CY1JB823J	J	AA	82 kohms,1/16W
RA124,125	VRS-CY1JB273J	J	AA	27 kohms,1/16W
RA126,127	VRS-CY1JB823J	J	AA	82 kohms,1/16W
RA128,129	VRS-CY1JB683J	J	AA	68 kohms,1/16W
RA130,131	VRS-CY1JB153D	J	AA	15 kohms,1/16W
RA132,133	VRS-CY1JB332D	J	AA	3.3 kohms,1/16W
RA134,135	VRS-CY1JB681D	J	AA	680 ohms,1/16W
RA136,137	VRS-CY1JB102D	J	AA	1 kohm,1/16W
RA138,139	VRS-CY1JB153D	J	AA	15 kohms,1/16W
RA140,141	VRS-CY1JB332D	J	AA	3.3 kohms,1/16W
RA142,143	VRS-CY1JB681D	J	AA	680 ohms,1/16W
RA144,145	VRS-CY1JB102D	J	AA	1 kohm,1/16W
RA146~149	VRS-CY1JB562J	J	AA	5.6 kohms,1/16W
RA150,151	VRN-CM05N470J	J	AE	47 ohms,5W,Metal Film
RA152,153	VRS-CY1JB472J	J	AA	4.7 kohms,1/16W

NO.	PART CODE	★	PRICE RANK	DESCRIPTION
RA155~158	VRS-CY1JB753D	J	AA	75 kohms,1/16W
RA159	VRS-CY1JB102J	J	AA	1 kohm,1/16W
RA161	VRS-CY1JB101J	J	AA	100 ohm,1/16W
RA170,171	VRS-CY1JB472J	J	AA	4.7 kohms,1/16W
RA172~175	VRS-CY1JB153D	J	AA	15 kohms,1/16W
RA204~207	VRS-CY1JB124D	J	AA	120 kohms,1/16W
RA208,209	VRS-CY1JB203D	J	AB	20 kohms,1/16W
RA222,223	VRS-CY1JB823J	J	AA	82 kohms,1/16W
RA224,225	VRS-CY1JB273J	J	AA	27 kohms,1/16W
RA226,227	VRS-CY1JB823J	J	AA	82 kohms,1/16W
RA228,229	VRS-CY1JB683J	J	AA	68 kohms,1/16W
RA230,231	VRS-CY1JB153D	J	AA	15 kohms,1/16W
RA232,233	VRS-CY1JB332D	J	AA	3.3 kohms,1/16W
RA234,235	VRS-CY1JB681D	J	AA	680 ohms,1/16W
RA236,237	VRS-CY1JB102D	J	AA	1 kohm,1/16W
RA238,239	VRS-CY1JB153D	J	AA	15 kohms,1/16W
RA240,241	VRS-CY1JB332D	J	AA	3.3 kohms,1/16W
RA242,243	VRS-CY1JB681D	J	AA	680 ohms,1/16W
RA244,245	VRS-CY1JB102D	J	AA	1 kohm,1/16W
RA246~249	VRS-CY1JB562J	J	AA	5.6 kohms,1/16W
RA250,251	VRN-CM05N470J	J	AE	47 ohms,5W,Metal Film
RA252,253	VRS-CY1JB472J	J	AA	4.7 kohms,1/16W
RA255~258	VRS-CY1JB753D	J	AA	75 kohms,1/16W
RA259	VRS-CY1JB102J	J	AA	1 kohm,1/16W
RA261	VRS-CY1JB101J	J	AA	100 ohm,1/16W
RA270,271	VRS-CY1JB472J	J	AA	4.7 kohms,1/16W
RA272~275	VRS-CY1JB153D	J	AA	15 kohms,1/16W
RA304~307	VRS-CY1JB124D	J	AA	120 kohms,1/16W
RA308,309	VRS-CY1JB203D	J	AB	20 kohms,1/16W
RA322,323	VRS-CY1JB823J	J	AA	82 kohms,1/16W
RA324,325	VRS-CY1JB273J	J	AA	27 kohms,1/16W
RA326,327	VRS-CY1JB823J	J	AA	82 kohms,1/16W
RA328,329	VRS-CY1JB683J	J	AA	68 kohms,1/16W
RA330,331	VRS-CY1JB153D	J	AA	15 kohms,1/16W
RA332,333	VRS-CY1JB332D	J	AA	3.3 kohms,1/16W
RA334,335	VRS-CY1JB681D	J	AA	680 ohms,1/16W
RA336,337	VRS-CY1JB102D	J	AA	1 kohm,1/16W
RA338,339	VRS-CY1JB153D	J	AA	15 kohms,1/16W
RA340,341	VRS-CY1JB332D	J	AA	3.3 kohms,1/16W
RA342,343	VRS-CY1JB681D	J	AA	680 ohms,1/16W
RA344,345	VRS-CY1JB102D	J	AA	1 kohm,1/16W
RA346~349	VRS-CY1JB562J	J	AA	5.6 kohms,1/16W
RA350,351	VRN-CM05N470J	J	AE	47 ohms,5W,Metal Film
RA352,353	VRS-CY1JB472J	J	AA	4.7 kohms,1/16W
RA355~358	VRS-CY1JB753D	J	AA	75 kohms,1/16W
RA359	VRS-CY1JB102J	J	AA	1 kohm,1/16W
RA361	VRS-CY1JB101J	J	AA	100 ohm,1/16W
RA370,371	VRS-CY1JB472J	J	AA	4.7 kohms,1/16W
RA372~375	VRS-CY1JB153D	J	AA	15 kohms,1/16W
RA400~402	VRS-CY1JB102J	J	AA	1 kohm,1/16W
RA403~405	VRS-CY1JB272J	J	AA	2.7 kohms,1/16W
RA406~408	VRS-CY1JB102J	J	AA	1 kohm,1/16W
RA409~414	VRS-CY1JB391J	J	AA	390 ohms,1/16W
RA415~420	VRN-VV3DAR10J	J	AB	0.1 ohm,2W,Metal Film
RA421,422	VRS-CY1JB334J	J	AA	330 kohms,1/16W
RA424	VRS-CY1JB223J	J	AA	22 kohms,1/16W
RA425	VRS-CY1JB473J	J	AA	47 kohms,1/16W
RA426	VRS-CY1JB683J	J	AA	68 kohms,1/16W
RA427	VRS-CY1JB223J	J	AA	22 kohms,1/16W
RA428	VRS-CY1JB823J	J	AA	82 kohms,1/16W
RA430	VRS-CY1JB104J	J	AA	100 kohm,1/16W
RA475	VRS-CY1JB103J	J	AA	10 kohm,1/16W
RA476	VRS-CY1JB472J	J	AA	4.7 kohms,1/16W
RA477	VRS-CY1JB473J	J	AA	47 kohms,1/16W
RA478	VRS-CY1JB102J	J	AA	1 kohm,1/16W
RA479	VRS-CY1JB473J	J	AA	47 kohms,1/16W
RA480	VRS-CY1JB103J	J	AA	10 kohm,1/16W
RA481	VRS-CY1JB473J	J	AA	47 kohms,1/16W
RM701,702	VRS-CY1JB103J	J	AA	10 kohm,1/16W
RM703	VRS-CY1JB180J	J	AA	18 ohms,1/16W
RM704	VRS-CY1JB220J	J	AA	22 ohms,1/16W
RM705	VRS-CY1JB224J	J	AA	220 kohms,1/16W
RM706,707	VRS-CY1JB151J	J	AA	150 ohms,1/16W
RM708	VRS-CY1JB681J	J	AA	680 ohms,1/16W
RM709~711	VRS-CY1JB331J	J	AA	330 ohms,1/16W
RM712	VRS-CY1JB182J	J	AA	1.8 kohms,1/16W
RM713	VRS-CY1JB331J	J	AA	330 ohms,1/16W
RM714	VRS-CY1JB182J	J	AA	1.8 kohms,1/16W
RM715	VRS-CY1JB820J	J	AA	82 ohms,1/16W
RM717	VRS-CY1JB473J	J	AA	47 kohms,1/16W
RM718,719	VRS-CY1JB103J	J	AA	10 kohm,1/16W
RM720	VRS-CY1JB683J	J	AA	68 kohms,1/16W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
RM721	VRS-CY1JB103J	J	AA	10 kohm,1/16W
RM723	VRS-CY1JB472J	J	AA	4.7 kohms,1/16W
RM730~732	VRS-CY1JB820J	J	AA	82 ohms,1/16W
RS01	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
RS03	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
RS04	VRD-ST2CD105J	J	AA	1 Mohm,1/6W
RS05~07	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
RT21	VRS-CY1JB103J	J	AA	10 kohm,1/16W
RT24	VRS-CY1JB563J	J	AA	56 kohms,1/16W
RT25	VRS-CY1JB103J	J	AA	10 kohm,1/16W
RT26	VRS-CY1JB563J	J	AA	56 kohms,1/16W
RT27~30	VRS-CY1JB102J	J	AA	1 kohm,1/16W

OTHER CIRCUITRY PARTS

BI105	QCNWN2613AWZZ	J	AC	Connector,Ass'y,2Pin
BI500/CNS500	QCNWN2531AWZZ	J	AH	Connector Ass'y,12/12Pin
BI601/CNS601	QCNWN2655AWZZ	J	AG	Connector Ass'y,5/5Pin
BI701/CNS701	QCNWN2527AWZZ	J	AF	Connector Ass'y,6/5Pin
BI702/CNS702	QCNWN2526AWZZ	J	AF	Connector Ass'y,6/5Pin
BI703	QCNWN2612AWZZ	J	AG	Connector,Ass'y,5Pin
BI931/CNS931	QCNWN2528AWZZ	J	AK	Connector Ass'y,14/13Pin
BI933/CNS933	QCNWN2530AWZZ	J	AF	Connector Ass'y,5/4Pin
CNA100	92LCONECP53253	J	AD	Plug,12Pin
CNA104	92LCONE4P53253	J	AB	Plug,4Pin
CNP401	92LCONE3P53253	J	AB	Plug,3Pin
CNP501	QCNCWZX33AWZZ	J		Socket,33Pin
CNP502	QCNCWZX15AWZZ	J	AD	Socket,15Pin
CNP506	QCNCWZX11AWZZ	J	AC	Socket,11Pin
CNP531	92LCONEDP53253	J	AE	Plug,13Pin
CNP601	92LCONE5P53253	J	AB	Plug,5Pin
CNP701	QCNCWZF33AWZZ	J	AF	Socket,33Pin
CNP702	QCNCWZF15AWZZ	J	AC	Socket,15Pin
CNP705	92LCONE5P53253	J	AB	Plug,5Pin
CNP901	92LCONE5P53253	J	AB	Plug,5Pin
⚠ CNP902	QCNCM049BAWZZ	J	AC	Plug,2Pin
CNS01	92LCONE6P53254	J	AC	Plug,6Pin
CNS02	92LCONE2P53254	J	AB	Plug,2Pin
⚠ F901	QFS-C402AAWNL	J	AD	T4A L 250V
FFC701	QCNWN2523AWZZ	J		Flat Cable,33Pin
FFC702	QCNWN2524AWZZ	J	AG	Flat Cable,15Pin
FFC703	QCNWN2525AWZZ	J	AC	Flat Cable,11Pin
FL701	VVK15MS04T+-1	J	AY	FL Display
JK1	QJAKJ0014AWZZ	J	AF	Jack,Headphones
JOG701	QSW-Z0016AWZZ	J	AF	Switch,Rotary Type [Jog Volume]
JT501	QSOCJ0410AWZZ	J	AF	Terminal,Line1 Input/Output
JT502	QSOCJ0410AWZZ	J	AF	Terminal,Line2/Line3 Input
LUG2~4	QLUGP0001AWZZ	J	AC	Lug
M501(233-1)	RMOTV0058AWZZ	J	AV	Motor,Air Cooling Fan
⚠ PC901,902	RH-FX0008GEZZ	J	AE	Photo-Coupler
RL897~899	RRLYD0016AWZZ	J	AH	Relay
RX101	VHPGP513RKB-1	J	AP	Optical Digital In,GP513RKB
RX701	VHLGP1UM271-1	J	AH	Remote Sensor,GP1UM271
SO501	QSOCJ0116AWZZ	J	AD	Jack,Subwoofer Out
SO889	QTANZ0001BGZZ	J	AK	Terminal,Speaker
SW701	92LSWICHT1663T	J	AC	Switch,Key Type [Digital]
SW702	92LSWICHT1663T	J	AC	Switch,Key Type [Line]
SW703	92LSWICHT1663T	J	AC	Switch,Key Type [Tuner (Band)]
SW704	92LSWICHT1663T	J	AC	Switch,Key Type [Tuning Up]
SW705	92LSWICHT1663T	J	AC	Switch,Key Type [Tuning Down]
SW706	92LSWICHT1663T	J	AC	Switch,Key Type [Power]
TUN1	RTUNS0030AWZZ	J	BF	Tuner Unit
⚠ VA901	VHVTN10V471-1	J	AE	Varistor/Surge Absorber,TN10V471

CABINET PARTS

201	CCABA5075AW01	J		Front Panel Ass'y
201- 1	————		—	Front Panel (Not Replacement Item)
201- 2	GCOVA1482AWSA	J	AC	Indicator Cover,Timer LED
201- 3	HBDGB1001AWSA	J	AD	Badge,SHARP
201- 4	HDECQ0832AWSA	J	AD	Indicator Cover,1-Bit
201- 5	HDECQ0933AWSA	J	AD	Indicator Cover,Remote Sensor
201- 6	HDECQ0989AWSA	J	AE	Window,FL Display
201- 7	HDECQ0990AWSA	J	AG	Decoration Panel,Volume Knob
201- 8	HDECQ0991AWSA	J	AD	Decoration Panel,Function LED
201- 9	JKNBZ0940AWSA	J	AF	Button,Function
201-10	JKNBZ0941AWSA	J	AE	Button,Power
202	GCAB-3099AWSA	J	AU	Top Cabinet
203	GITAR1231AWSA	J	AM	Rear Panel

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NO.	PART CODE	★	PRICE RANK	DESCRIPTION
204	JKNBZ0939AWSA	J	AH	Knob,Volume
205	LANGK0373AWFW	J	AK	Bracket,Front
206	LANGK0395AWFW	J	AC	Bracket,Earth
207	LANGQ0015AWZZ	J	AE	Bracket,1-Bit Power Conductor
208	LBSHC0002AWZZ	J	AD	Bushing,AC Power Supply Cord
209	LCHSM0180AWFW	J	AQ	Main Chassis
210	LHLDZ1397AWZZ	J	AD	Holder,Delta LED
211	LHLDZ9009AWZZ	J	AD	Holder,FL Display
212	LHLDZ9010AWZZ	J	AD	Holder,Function LED
213	LHLDZ9012AWZZ	J	AD	Holder,Timer LED
214	PCOVQ1010AWFW	J	AD	Cover,Shield
215	PCOVQ1012AWSA	J	AE	Cover,Fan Motor
216	PCUSG0022AWZZ	J	AB	Cushion,Leg
217	PRDAR0300AWFW	J	AG	Heat Sink,AC
218	PRDAR0278AWFW	J	AN	Heat Sink,1-Bit Top
219	PRDAR0279AWFW	J	AS	Heat Sink,1-Bit
220	PRDAR0283AWFW	J	AF	Heat Sink,Main
221	PRDAR0301AWFW	J	AE	Heat Sink,D
222	PRDAR0298AWFW	J	AF	Heat Sink,H
223	PSHEP0140AWZZ	J	AE	Sheet,Display PWB Protection,A
225	PSPAS0017AWZZ	J	AD	Boss,Power PWB
226	PSPAS0019AWZZ	J	AC	Boss,Main PWB
227	PSPAZ0039AWZZ	J	AC	Spacer
⚠ 228	QACCB0020AW00	J	AU	AC Power Supply Cord with CNS902
⚠ 228	QACCE0018AW00	J	AL	AC Power Supply Cord with CNS902
⚠ 228	QACCZ0029AWZZ	J		AC Power Supply Cord with CNS902
⚠ 229	QFSHD0001AWZZ	J	AB	Holder,Fuse
230	TLABZ1371AWZZ	J	AC	Label,Speaker
231	TSPC-1270AWZZ	J	AE	Label,Specifications [Except for U.K./Korea/Russia]
231	TSPC-1271AWZZ	J		Label,Specifications [For U.K.]
231	TSPC-1297AWZZ	J		Label,Specifications [For Russia]
231	TSPC-1326AWZZ	J		Label,Specifications [For Korea]
232	92LCSPR1431C	J	AA	Spring,Ring
233	92LFAN5074ASY1	J	AX	Fan Motor Ass'y
233- 1(M501)	RMOTV0058AWZZ	J	AV	Motor,Air Cooling Fan
233- 2	LANGK0374AWFW	J	AE	Bracket,Fan Motor
233- 3	PCUSG0095AWZZ	J	AD	Cushion
234	92LNBAND1318A	J	AA	Nylon Band,80mm
235	RCORF0028AWZZ	J	AT	Core
236	————		—	Nut (Not Replacement Item)
237	RCORF0018AWZZ	J	AG	Core
238	PSHEP0139AWZZ	J	AB	Sheet,Display PWB Protect,B
239	PSLDM9006AWFW	J	AL	Shield Plate,DSP
240	PCUSG0158AWZZ	J	AB	Cushion,Shield
241	QCNWN2651AWZZ	J	AC	Lug Wire
242	RCORF0024AWZZ	J	AD	Core
243	LANGZ0073AWFW	J		Bracket,EMC
601	LX-JZ0036AWFD	J	AB	Screw,ø3×12mm
602	LX-JZ0047AWFD	J	AB	Screw,ø3×8mm
603	XEBSD26P10000	J	AA	Screw,ø2.6×10mm
604	XJBSD30P08000	J	AA	Screw,ø3×8mm
605	XJBSD30P12000	J	AA	Screw,ø3×12mm
606	XJBSD30P16000	J	AA	Screw,ø3×16mm
607	XJBSF30P08000	J	AA	Screw,ø3×8mm
608	XJBSF30P14000	J	AA	Screw,ø3×14mm
609	XJBSF30P16000	J	AA	Screw,ø3×16mm
610	LX-JZ0172AFFN	J	AB	Screw,ø3×10mm
611	XJSSF30P10000	J	AA	Screw,ø3×10mm

ACCESSORIES/PACKING PARTS

1	QANTL0014AWZZ	J	AP	AM Loop Antenna
2	QCNWG0067AWZZ	J		Speaker Cord
3	RRMCG0369AWSA	J	AU	Remote Control
4	SPAKA0421AWZZ	J	AH	Packing Add.,Left/Right
5	SPAKC1650AWZZ	J		Packing Case
6	SPAKP0026AWZZ	J	AB	Polyethylene Bag,AC Power Supply Cord [For U.K. Only]
7	SPAKZ1017AWZZ	J	AH	Pad,Protection
8	SPAKZ1090AWZZ	J	AD	Pad,Protection
9	SSAKA0007AWZZ	J	AB	Polyethylene Bag,Accessories
10	SSAKH0124AWZZ	J	AE	Polyethylene Bag,Unit
11	TCAUH0094AWZZ	J	AB	Caution,Speaker [Except for Korea/Russia]
11	TCAUH0096AWZZ	J		Caution,Speaker [For Korea]
11	TCAUH0097AWZZ	J		Caution,Speaker [For Russia]
12	TCAUZ0173AWZZ	J	AB	Caution,Subwoofer [Except for Korea/Russia]
12	TCAUZ0175AWZZ	J		Caution,Subwoofer [For Korea]
12	TCAUZ0176AWZZ	J		Caution,Subwoofer [For Russia]
13	TGAN-3170UMZZ	J	AE	Warranty Card [For U.K. Only]
14	TINSE0543AWZZ	J	AD	Quick Guide [For U.K.]
14	TINSZ0955AWZZ	J	AD	Quick Guide [Except for U.K./Korea/Russia]
14	TINSZ0970AWZZ	J		Quick Guide [For Russia]
14	TINSZ0971AWZZ	J		Quick Guide [For Korea]
15	TINSE0545AWZZ	J	AE	Operation Manual [For U.K.]
15	TINSZ0943AWZZ	J	AN	Operation Manual [Except for U.K./Korea/Russia]
15	TINSZ0957AWZZ	J		Operation Manual [For Korea]
15	TINSZ0958AWZZ	J		Operation Manual [For Russia]
16	TLABE0776AWZZ	J	AB	Label,Bar Code [Except for Russia]
16	TLABE0792AWZZ	J		Label,Bar Code [For Russia]
17	TLABM0176AWSA	J	AC	Label,Feature
18	TLABZ0604AWZZ	J	AB	Label,Energy [Except for Korea/Russia Only]
19	TLABZ0620AWZZ	J	AB	Label,Saving Energy (Set) [Except for Korea Only]
20	92LFANT1535A	J	AF	FM Antenna
21	TLABS0102AWZZ	J	AB	Label,Gost Rostest [For Russia Only]
22	————		—	Battery,SUM-3 (Not Replacement Item) [Except for U.K. Only]

P.W.B. ASSEMBLY (Not Replacement Item)

PWB-A1~4	92LPWB5075MANS	J	—	Main/Display/Headphones/ Remote Sensor (Combined Ass'y)
⚠ PWB-B	92LPWB5075PWRS	J	—	Power
PWB-C	92LPWB5074PTCS	J	—	Protect Circuit

CP-AT1000HF/CP-AT1000HC/CP-AT1000HR

FRONT SPEAKER BOX PARTS

901	CPNLS1084AW01	J	AV	Front Panel Ass'y
902	GCAB-1231AW01	J	BA	Rear Cabinet Ass'y
903	QTANA9017AWZZ	J	AK	Terminal,Speaker
904	QCNWN2535AW01	J	AH	Speaker Cord Ass'y
905	PKYU-0008AWZZ	J	AD	Absorber
906	TSPC-1282AWZZ	J	AH	Label,Specifications,Right
906	TSPC-1283AWZZ	J	AH	Label,Specifications,Left
907	XEBSF30P12000	J	AA	Screw,ø3×12mm
908	PCUSS0068AWZZ	J	AC	Cushion,Speaker
SP1~4	RSPA00107AWWP	J	AX	Speaker

CENTER SPEAKER BOX PARTS

901	CPNLS1084AW02	J	AV	Front Panel Ass'y
902	GCAB-1231AW01	J	BA	Rear Cabinet Ass'y
903	QTANA9017AWZZ	J	AK	Terminal,Speaker
904	QCNWN2535AW01	J	AH	Speaker Cord Ass'y
905	PKYU-0008AWZZ	J	AD	Absorber
906	TSPC-1286AWZZ	J	AH	Label,Specifications
907	XEBSF30P12000	J	AA	Screw,ø3×12mm
908	PCUSS0068AWZZ	J	AC	Cushion,Speaker
SP1,2	RSPA00107AWWP	J	AX	Speaker

SURROUND SPEAKER BOX PARTS

901	CPNLS1089AW01	J	AV	Front Panel Ass'y
902	GCAB-1231AW01	J	BA	Rear Cabinet Ass'y
903	QTANA9017AWZZ	J	AK	Terminal,Speaker
904	QCNWN2564AWZZ	J	AF	Speaker Cord
905	PKYU-0008AWZZ	J	AD	Absorber
906	TSPC-1284AWZZ	J	AH	Label,Specifications,Right
906	TSPC-1285AWZZ	J	AH	Label,Specifications,Left
907	XEBSF30P12000	J	AA	Screw,ø3×12mm
SP1,2	RSPA00091AW8P	J	AV	Speaker

ACCESSORIES/PACKING PARTS

1	PCUSG0129AWSA	J	AC	Sheet,Leg

NO.	PART CODE	★	PRICE RANK	DESCRIPTION
2	SPAKA0424AWZZ	J	AM	Packing Add.,Top/Bottom
3	SSAKH0119AWZZ	J	AC	Miramat Bag
4	TLABZ1417AWZZ	J	AG	Label,Model

CP-AT1000HSW

SUBWOOFER BOX PARTS

901	GBOXS0123AWM3	J		Speaker Box Ass'y
902	CPNLS1085AW01	J	AZ	Front Panel Ass'y
903	GITAU0002AWSA	J	AZ	Subwoofer Stand
904	QTANA9010AWSA	J	AK	Terminal,Speaker
905	QCNWN2536AWZZ	J	AF	Speaker Cord
906	PDUC-0022AWZZ	J	AF	Duct Pipe
907	PCUSZ0066AWZZ	J	AC	Cushion,Duct
908	PKYU-0009AWZZ	J	AL	Absorber
909	PCUSG0139AWZZ	J	AG	Cushion,Leg
910	TSPC-1287AWZZ	J		Label,Specifications
911	XMBSF40P20000	J	AC	Screw,ø4×20mm
912	PCUSS0067AWZZ	J	AD	Cushion,Stopper
913	PCUSF0009AWZZ	J		Felt,A
914	PCUSF0010AWZZ	J		Felt,B
915	PCUSF0011AWZZ	J		Felt,C
SP1	RSPA10101AW4W	J	BD	Woofer

ACCESSORIES/PACKING PARTS

1	SPAKA0423AWZZ	J	AM	Packing Add.,Top/Bottom
2	SSAKH0120AWZZ	J	AE	Miramat Bag
3	TLABZ1418AWZZ	J	AG	Label,Model

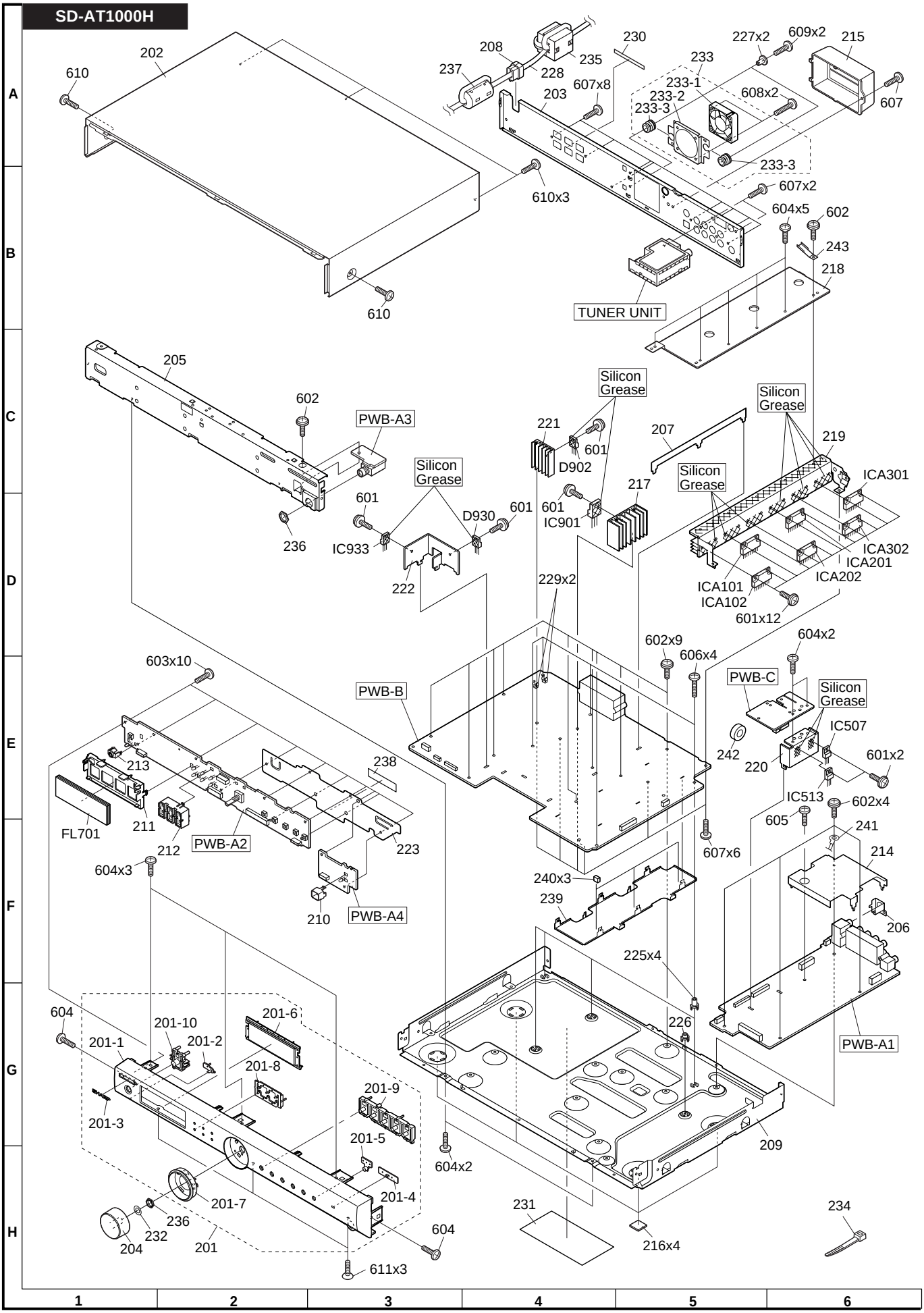


Figure 9 CABINET EXPLODED VIEW

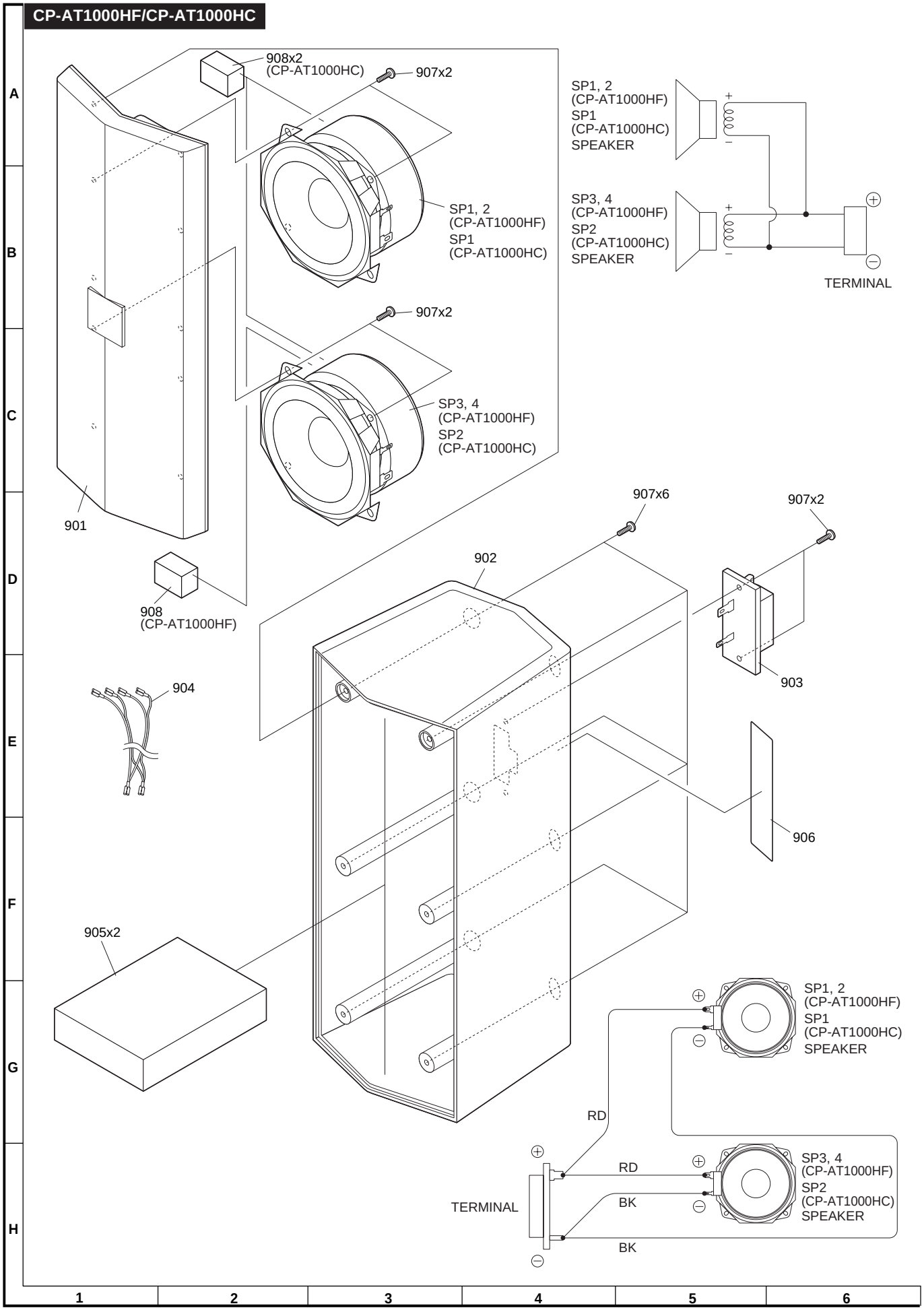


Figure 10 SPEAKER EXPLODED VIEW (1/3)

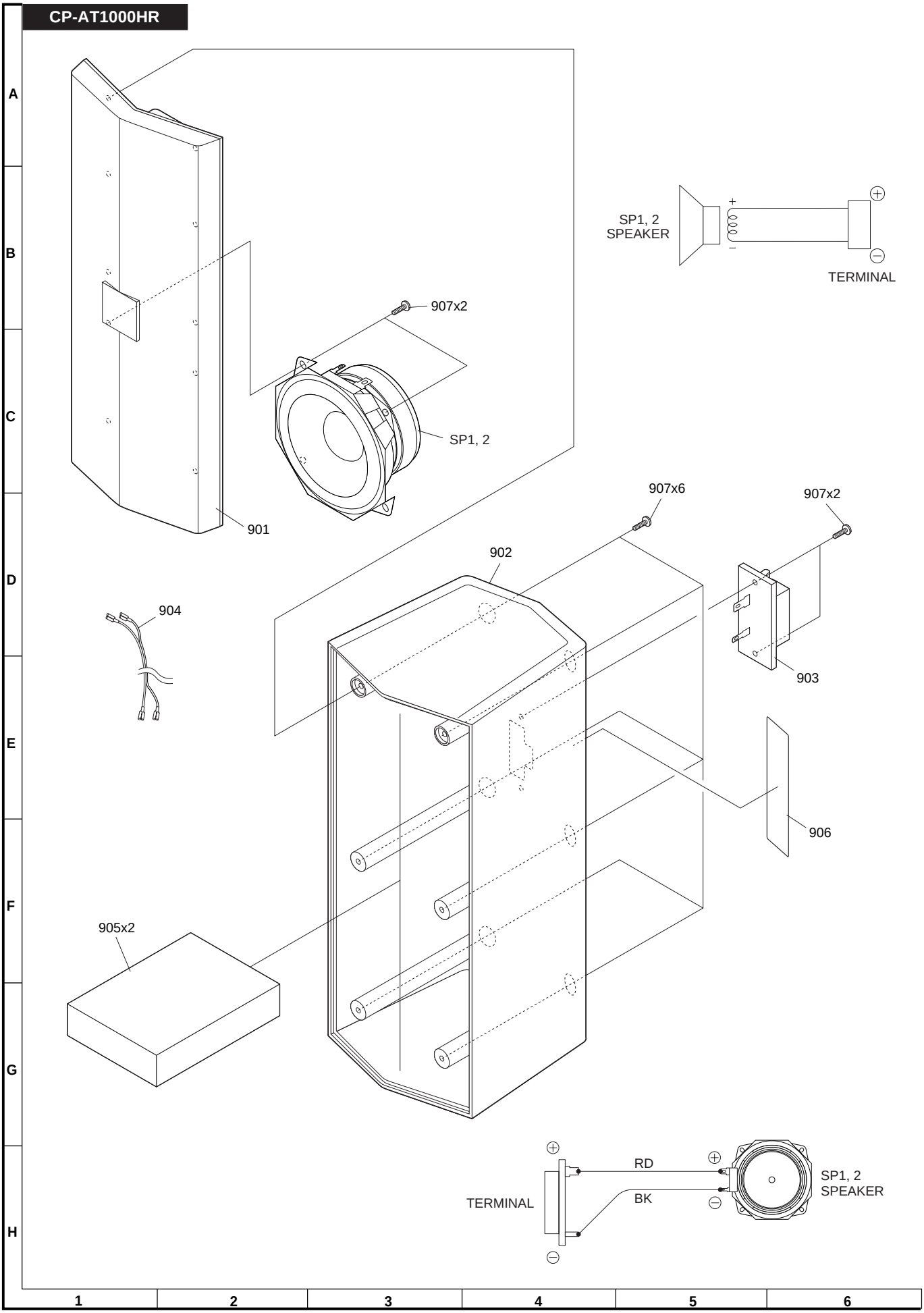


Figure 11 SPEAKER EXPLODED VIEW (2/3)

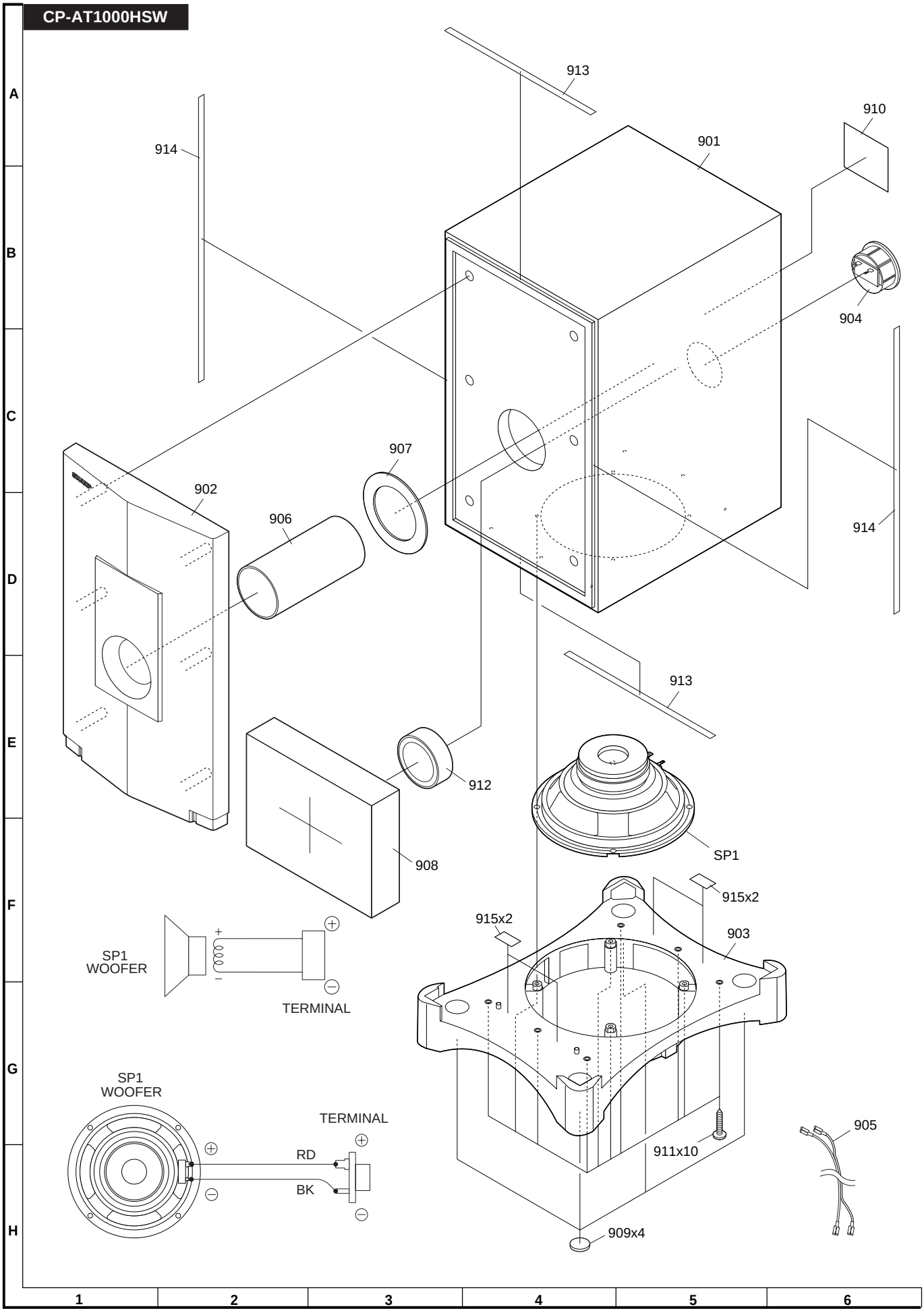


Figure 12 SPEAKER EXPLODED VIEW (3/3)

PACKING METHOD (FOR U.K. ONLY)

SD-AT1000H

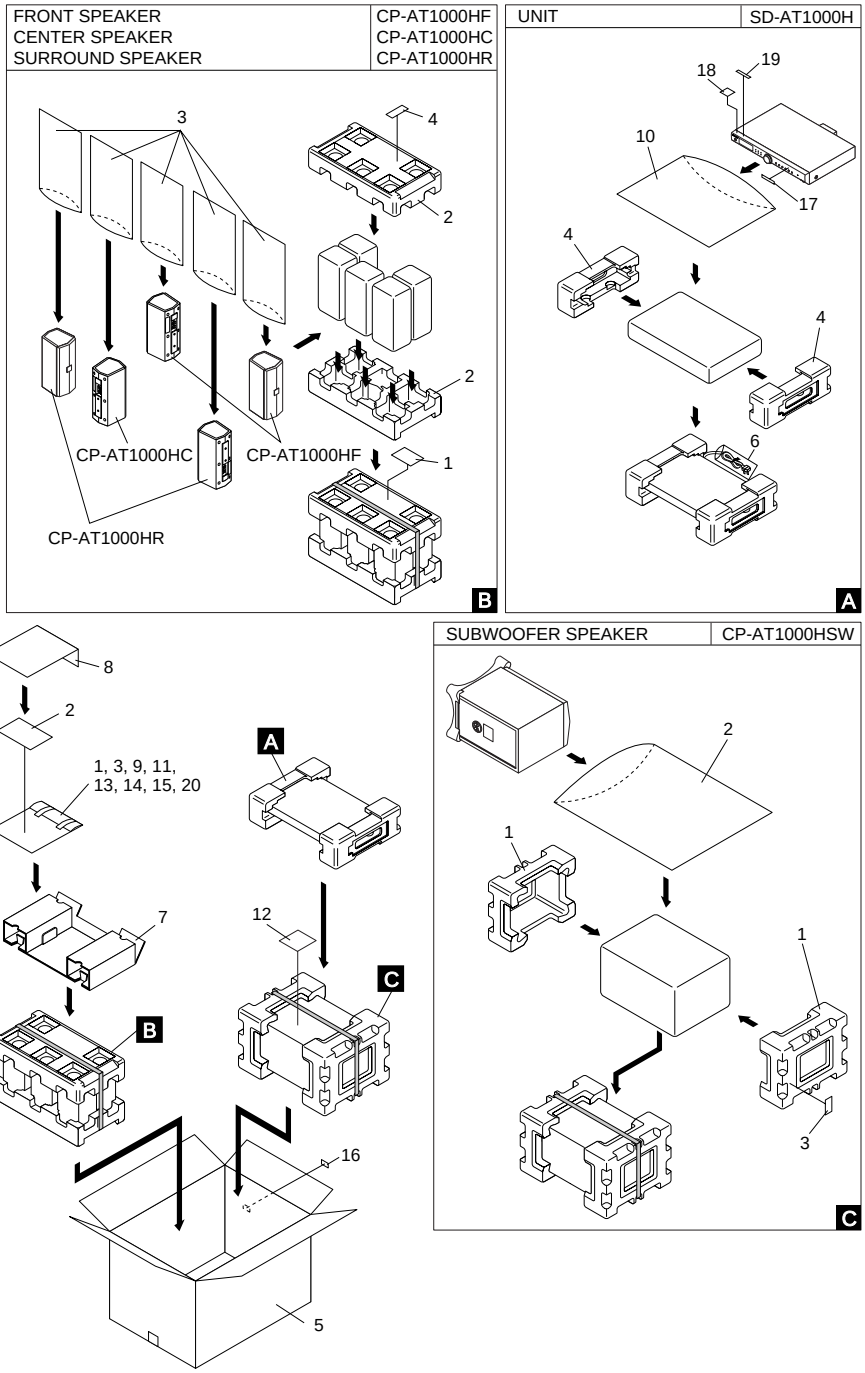
1. AM Loop Antenna	QANTL0014AWZZ
2. Speaker Cord	QCNWG0067AWZZ
3. Remote Control	RRMCG0369AWSA
4. Packing Add., Left/Right	SPAKA0421AWZZ
5. Packing Case	SPAKC1650AWZZ
6. Polyethylene Bag, AC Power Supply Cord	SPAKP0026AWZZ
7. Pad, Protection	SPAKZ1017AWZZ
8. Pad, Protection	SPAKZ1090AWZZ
9. Polyethylene Bag, Accessories	SSAKA0007AWZZ
10. Polyethylene Bag, Unit	SSAKH0124AWZZ
11. Caution, Speaker	TCAUH0094AWZZ
12. Caution, Subwoofer	TCAUZ0173AWZZ
13. Warranty Card	TGAN-3170UMZZ
14. Quick Guide	TiNSE0543AWZZ
15. Operation Manual	TiNSE0545AWZZ
16. Label, Bar Code	TLABE0776AWZZ
17. Label, Feature	TLABM0176AWSA
18. Label, Energy	TLABZ0604AWZZ
19. Label, Saving Energy (Set)	TLABZ0620AWZZ
20. FM Antenna	92LFANT1535A

CP-AT1000HF/CP-AT1000HC/CP-AT1000HR

1. Sheet, Leg	PCUSG0129AWSA
2. Packing Add., Top/Bottom	SPAKA0424AWZZ
3. Miramat Bag	SSAKH0119AWZZ
4. Label, Model	TLABZ1417AWZZ

CP-AT1000HSW

1. Packing Add., Top/Bottom	SPAKA0423AWZZ
2. Miramat Bag	SSAKH0120AWZZ
3. Label, Model	TLABZ1418AWZZ



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